SAMSUNG

# LCD-TV

**Chassis : N88A**

**Model : LA22C450E1**
**LA26C450E1**
**LA32C450E1**

# SERVICE Manual

TFT-LCD TV

**LA22C450E1/LA26C450E1/LA32C450E1**

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**GSPN (Global Service Partner Network)**

| Area | Web Site |
|---|---|
| North America | http://service.samsungportal.com |
| Latin America | http://latin.samsungportal.com |
| CIS | http://cis.samsungportal.com |
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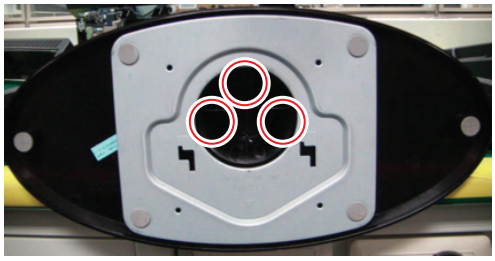
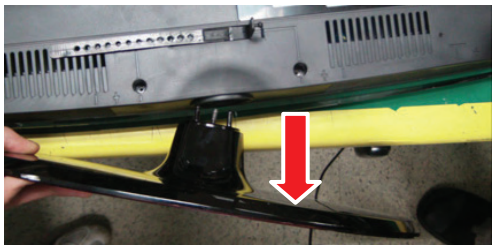
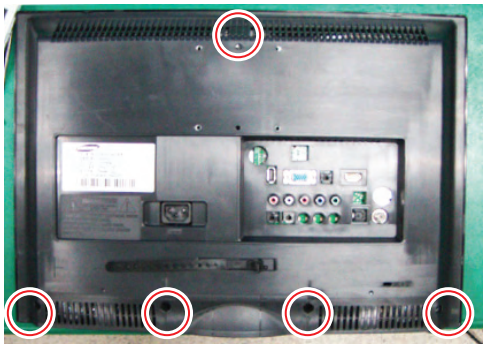
# 3. Disassembly and Reassembly

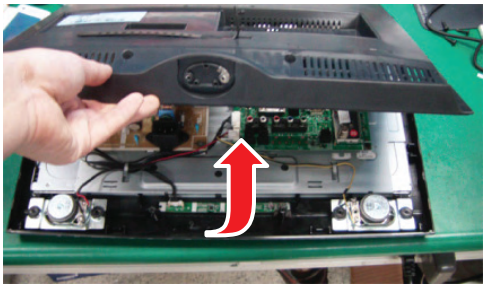
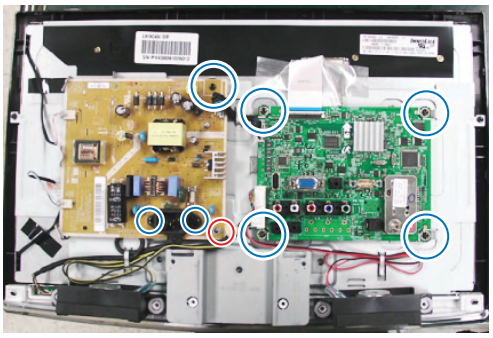
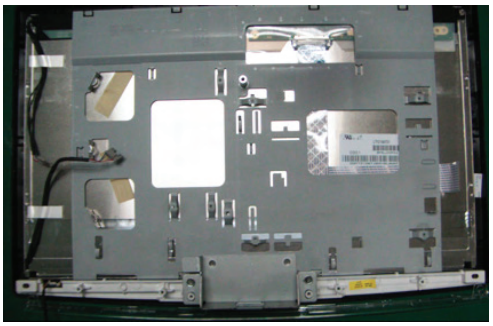
This section of the service manual describes the disassembly and reassembly procedures for the LCD TV.

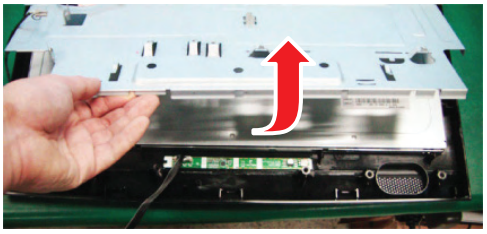
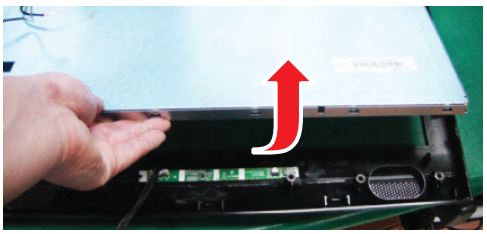
⚠ **WARNING:** This LCD TV contains electrostatically sensitive devices. Use caution when handling these components.

## 3-1. Disassembly and Reassembly (LA22C450)

⚠ **Cautions:** 1. Disconnect the LCD TV from the power source before disassembly.
2. Follow these directions carefully; never use metal instruments to pry apart the cabinet.

| Description | Picture Description | Screws |
|---|---|---|
| 1. Remove 3 Screws from the stand.<br>Remove stand. | | |
| |  | <br>6002-001294<br>(M4 x L16, Tapping) |
| |  | |
| 2. Remove the 5 screws of rear-cover. |  | <br>6002-001294<br>(M4 x L16, Tapping) |

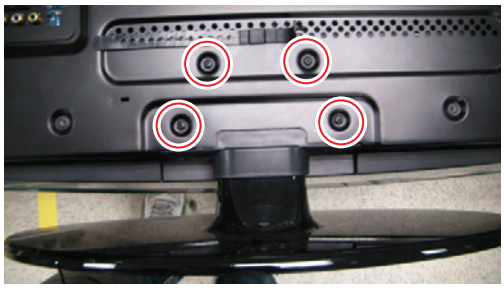
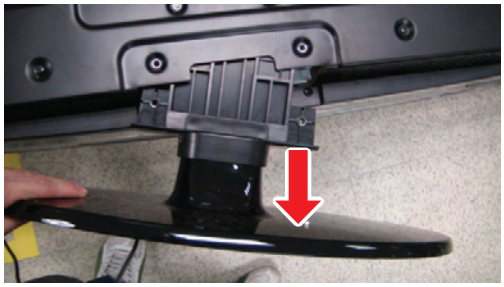
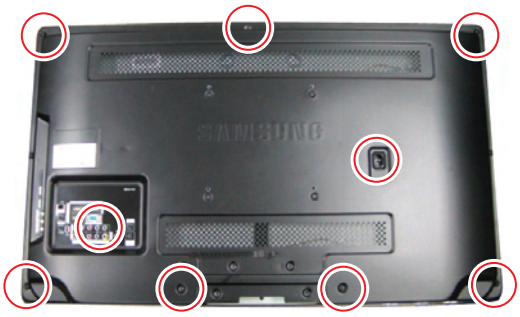
| Description | Picture Description | Screws |
|---|---|---|
| 3. Lift up the rear-cover. |  | |
| 4. Remove the left and right speaker. | | |
| 5. Remove the 4 screws of main board and 4 screws of IP board. |  | <br>6003-001439<br>(M4 x L8, TAPTYPE)<br> <br>6002-001294<br>(M4 x L16, Tapping) |
| 6. Remove the bracket stand link. |  | |

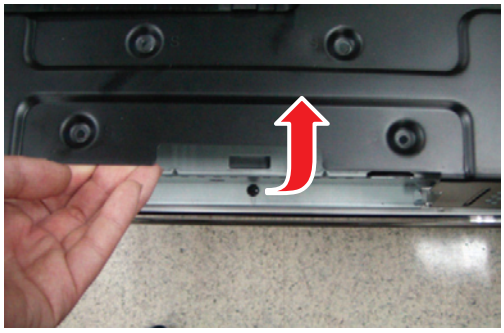
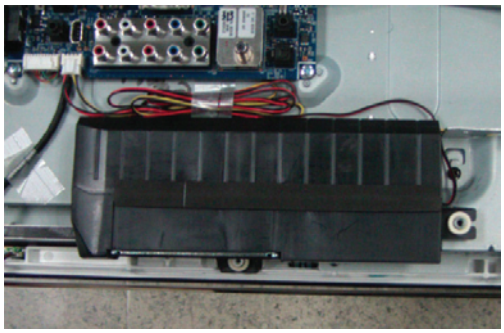
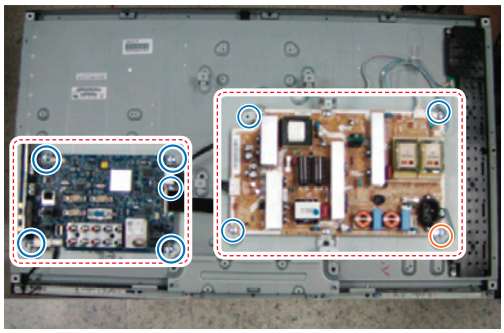
| Description | Picture Description | Screws |
|---|---|---|
| 7. Lift up the stand link. |  | |
| 8. Lift up the panel. |  | |

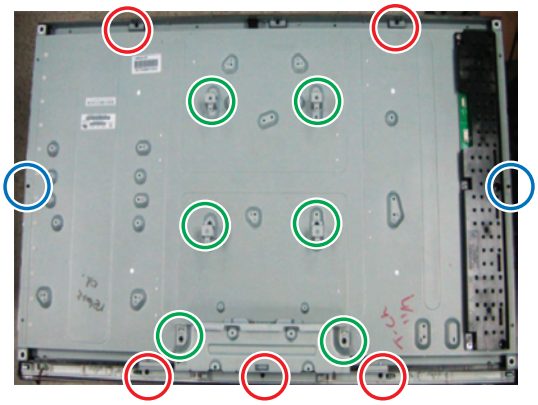
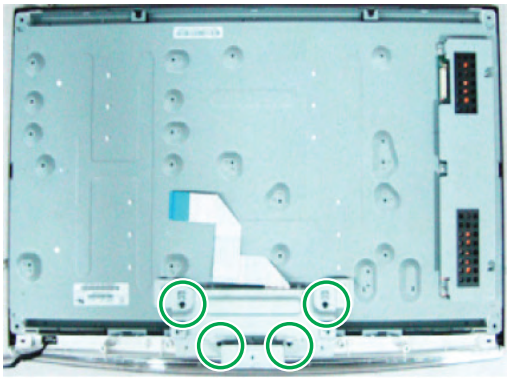
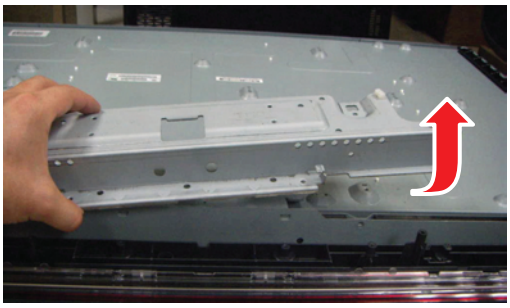
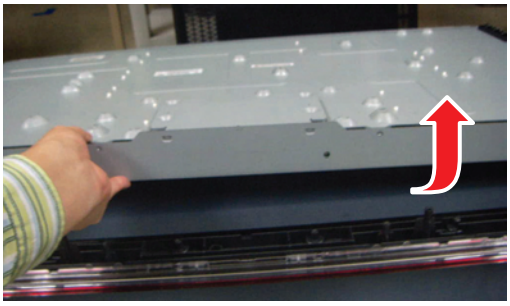
※ Reassembly procedures are in the reverse order of disassembly procedures.

## 3-2. Disassembly and Reassembly (LA32C450)

⚠ **Cautions:** 1. Disconnect the LCD TV from the power source before disassembly.
2. Follow these directions carefully; never use metal instruments to pry apart the cabinet.

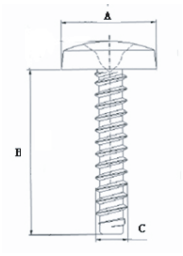
| Description | Picture Description | Screws |
|---|---|---|
| 1. Place the TV face down on cushioned table.<br>Remove 4 screws from the Stand.<br>Remove stand. | | |
| |  | <br>6003-001003 |
| |  | |
| 2. Remove the 9 screws of rear-cover. |  | <br>6003-001003 |

| Description | Picture Description | Screws |
|---|---|---|
| 3. Lift up the rear-cover. |  | |
| 4. Remove the left and right speaker. |  | |
| 5. Remove the 5 screws of main board and 4 screws of IP Board. |  | 6001-002284 6003-001439 |

| Description | Picture Description | Screws |
|---|---|---|
| 6. Remove the 2screws of panel and front.<br>Remove the 4 screws of bracket stand link. |  <br>  | <br>6003-000337<br> <br>6003-000337<br>ONLY<br>32"C5X0<br> <br>6003-001003 |
| 7. Lift up the stand link. |  | |
| 8. Lift up the panel. |  | |

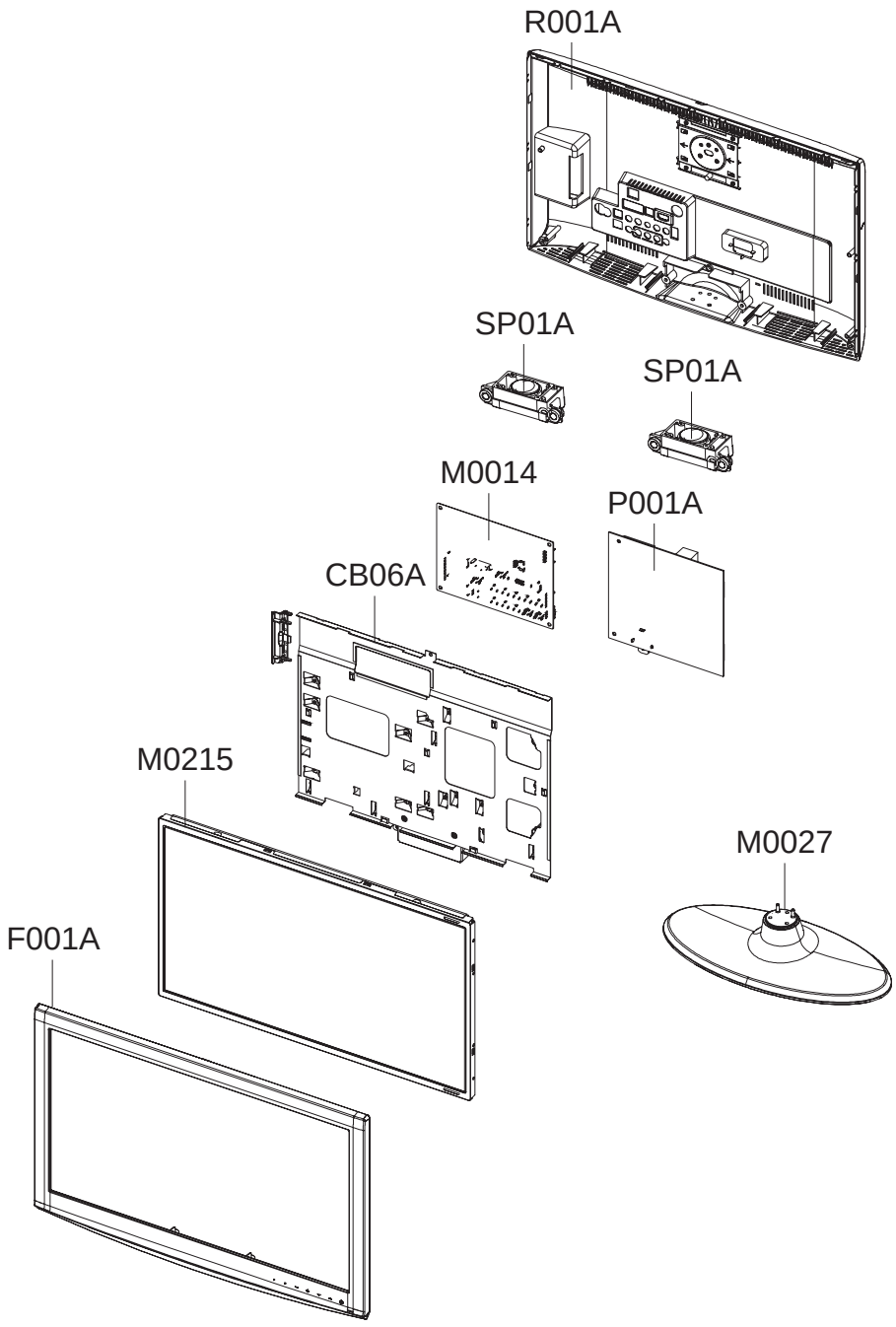
※ Reassembly procedures are in the reverse order of disassembly procedures.

**Screw Size**

| Code No. | A (mm) | B (mm) | C (mm) | Q'ty | |
|---|---|---|---|---|---|
| 6001-002284 | 8.3±0.5 | 8.0±0.6 | 3.83~3.98 | 8(26"/32"/37"), 10(40"/46") |  |
| 6003-000337 | 7.3~8.3 | 9.2~10.0 | 3.73~3.83 | 4(26"), 8(32"), 6(37"/40"46") | |
| 6003-001439 | 8.3±0.4 | 8.0±0.4 | 3.85~3.93 | 1(ALL) | |
| 6003-001003 | 7.80~8.30 | 11.20~12.00 | 3.81~3.91 | 10(26") 12(32"450)<br>13(32"5XX). 17(37"), 15(40"), 18(46") | |

# 5. Exploded View & Part List

## 5-1. LA22C450E1 Exploded View



# 5-2. LA22C450E1 Parts List

| Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|---|---|---|---|---|---|
| CB06A | BN96-12734D | ASSY BRACKET P-PANEL;LC450 22,SO,T0.8,HD | 1 | SNA | |
| F001A | BN96-12731C | ASSY COVER P-FRONT;LC450 22,SO,ABS+PMMA, | 1 | SA | |
| M0014 | BN94-03325G | ASSY PCB MAIN;LA22C450E1LXL | 1 | SA | |
| M0027 | BN96-12739A | ASSY STAND P-BASE;LC450 22,ABS+PMMA,HB,B | 1 | SA | |
| M0215 | BN07-00757A | LCD-PANEL;LTF216AT01,SS6YTS,6bit Hi-FRC, | 1 | SA | |
| P001A | BN44-00370B | AC VSS(I)-LIPS;PSIV680510B,EI22HD_ASM,6. | 1 | SA | |
| R001A | BN96-12736B | ASSY COVER P-REAR;LC450 22,SO,HIPS,HB,BK | 1 | SA | |
| SP01A | BN96-12940C | ASSY SPEAKER P;16ohm,4pin,3W,L:120 R:190 | 1 | SA | |

# 5-2-1. LA22C450E1 Parts List

**Service Bom** (SA: SERVICE AVAILABLE, SNA: SERVICE NOT AVAILABLE)

| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|---|---|---|---|---|---|---|
| 0.1 | | BN90-02426C | ASSY COVER FRONT;LC450 22 | 1 | SNA | |
| ..2 | F001A | BN96-12731C | ASSY COVER P-FRONT;LC450 22,SO,ABS+PMMA, | 1 | SA | |
| ...3 | | BN61-04692A | BOSS-PRIMER;#94,clear,35cps | 0.001 | SNA | |
| ...3 | | BN61-04731A | BOSS-TAPE;AMBER,ACRYL,T1.1,W8.0mm,WHITE | 0.35 | SNA | |
| ...3 | | BN61-06143B | HOLDER-BOSS BOTTOM;LC450 22,ABS,HB,WT003 | 1 | SNA | |
| ...3 | F001 | BN63-06507C | COVER-FRONT;LC450 22,SO,ABS+PMMA,HB,RD00 | 1 | SNA | |
| ...3 | AD070 | BN64-01261A | DECORATION-BOTTOM;LC450 22,PC CLEAR,V2,T | 1 | SNA | |
| ...3 | | BN68-02553A | LABEL-LCD-POP;L450(22/19),Asia,PET,T0.05 | 1 | SNA | |
| ...3 | M0125 | BN96-13046C | ASSY BOARD P-TOUCH FUNCTION&IR;LN22C450, | 1 | SA | |
| ...3 | | BN60-00162Z | SPACER-FOAM;FOAM,50000mm,Dark Gray,0.35T | 1.56 | SNA | |
| ...3 | AB326 | BN61-04661A | BRACKET-STOPPER;L650,SK-5,T0.4,Plating,H | 2 | SNA | |
| ...3 | CCM1 | BN63-05199D | COVER-SHEET;AMBER,PE,T0.08,W75mm,200M,CL | 0.6 | SNA | |
| ...3 | CCM1 | BN63-05199Q | COVER-SHEET;CREAM,PE,T0.08,W50,200M,CLEA | 1.3 | SNA | |
| ..2 | SP01A | BN96-12940C | ASSY SPEAKER P;16ohm,4pin,3W,L:120 R:190 | 1 | SA | |
| 0.1 | R001A | BN90-02430B | ASSY COVER REAR;LC450 22 | 1 | SNA | |
| ..2 | T0081 | 6002-001294 | SCREW-TAPPING;BH,+,,M4,L16,ZPC(BLK) | 6 | SA | |
| ..2 | R001A | BN96-12736B | ASSY COVER P-REAR;LC450 22,SO,HIPS,HB,BK | 1 | SA | |
| ...3 | T0101 | BN61-06145A | BRACKET-WALL;SECC,1.0,LC450 22" | 1 | SNA | |
| ...3 | R001 | BN63-06509B | COVER-REAR;LC450 22,HIPS,HB,BK0020 | 1 | SNA | |
| ...3 | T0071 | BN64-01265A | INLAY-TERMINAL;LC450 22",PS SHEET,T0.5,E | 1 | SNA | |
| ...3 | T0139 | BN65-00002A | CLAMPER CORE;BORDEAUX,LDPE,BLK | 1 | SNA | |
| 0.1 | M0216 | BN90-02433A | ASSY STAND;LC450 22 | 1 | SNA | |
| ..2 | M0027 | BN96-12739A | ASSY STAND P-BASE;LC450 22,ABS+PMMA,HB,B | 1 | SA | |
| ...3 | M0081 | 6003-001001 | SCREW-TAPTYPE;FH,+,B,M3,L8,ZPC(BLK),SWRC | 4 | SNA | |
| ...3 | | BN61-06187A | BRACKET-STAND BASE;SECC,1.0,LC450 22" | 1 | SNA | |
| ...3 | CCM1 | BN63-02183D | COVER-SHEET;Rhcm,PE Vinyl,T0.04,680mm,20 | 0.6 | SNA | |
| ...3 | | BN63-06508A | COVER-STAND BASE;LC450 22,ABS+PMMA,HB,BK | 1 | SNA | |
| ...3 | AR011 | BN73-00077A | RUBBER FOOT;MATISSE,BUMPON,#13.5,T2.0,60 | 6 | SNA | |
| 0.1 | | BN91-04259B | ASSY LCD-AMLCD;BN07-00757A,TN ZBD | 1 | SNA | |
| ..2 | M0215 | BN07-00757A | LCD-PANEL;LTF216AT01,SS6YTS,6bit Hi-FRC, | 1 | SA | |
| 0.1 | M0017 | BN91-05028G | ASSY CHASSIS;LA22C450E1LXL | 1 | SNA | |
| ..2 | M0014 | BN94-03325G | ASSY PCB MAIN;LA22C450E1LXL | 1 | SA | |
| ...3 | | 3701-001480 | CONNECTOR-DSUB;15P,3R,FEMAIL,STAMPED PIN | 1 | SA | |
| ...3 | PCN1 | 3711-004712 | HEADER-BOARD TO CABLE;BOX,9P,1R,2mm,STRA | 1 | SA | |
| ...3 | T0527 | BN68-00513A | LABEL-E,PASS;ALL MODEL,YUPO(110G),50X15, | 1 | SNA | |
| ...3 | T0527 | BN68-01742A | LABEL;Chip Label,10,16 | 1 | SNA | |
| ...3 | JA330 | 3722-003038 | JACK-PHONE;7P/1C W/L,SN,BLK | 3 | SA | |
| ...3 | | 3722-003051 | JACK-PIN;3P W/L,NI/SN,YEL/WHT/RED,STRAIG | 1 | SA | |
| ...3 | JA333 | 3722-003052 | JACK-PIN;5P+Shield W/L,NI/SN,GN/BL/RD/WH | 1 | SA | |
| ...3 | T0066 | BN62-00040A | HEAT SINK-ES;SAPPHIRE,T2.0,36*36*6.6,BLK | 1 | SNA | |
| ...3 | M0412 | BN96-11826C | ASSY BRACKET P-PCB;LB450 40,SPTE T0.5 + | 1 | SNA | |
| ....4 | | BN61-04928C | BRACKET-SUPPORT PCB;SPTE,T 0.5,SCREW-M4 | 1 | SNA | |
| ....4 | | BN61-05262B | HOLDER-BOSS PCB;52,LB550(EO),PBT+G/F(30% | 1 | SNA | |
| ...3 | | 0202-001608 | SOLDER-WIRE FLUX;LFC7-107,D0.8,99.3Sn/0. | 0.25 | SNA | |
| ...3 | CN906 | 3707-001096 | CONNECTOR-OPTICAL;STRAIGHT W/L,SPDIF | 1 | SA | |
| ...3 | CIS3 | BN40-00173A | TUNER;DTOS40CVL081A,DVB-T/C,164CH,38.9MH | 1 | SA | |
| ...3 | | BN97-04046L | ASSY SMD;NEW MODEL | 1 | SNA | |
| ....4 | | 0202-001767 | SOLDER-CREAM;LST-5710,D20~38,Sn-57Bi-1Ag | 2.221 | SNA | |

| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|---|---|---|---|---|---|---|
| ....4 | DS01A | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO | 14 | SA | |
| ....4 | | 0403-001164 | DIODE-ZENER;MMSZ5232B,5.32-5.88V,500MW,S | 1 | SA | |
| ....4 | | 0403-001783 | DIODE-ZENER;BZB84-C6V2,5.8/6.6V,300mW,SO | 5 | SNA | |
| ....4 | D0254 | 0404-001404 | DIODE-SCHOTTKY;BAT721C,40V,200mA,SOT-23, | 1 | SA | |
| ....4 | T0139 | 0406-001271 | DIODE-TVS;RCLAMP0524P,6/-/-V,150W,SLP251 | 3 | SNA | |
| ....4 | SD3 | 0407-000114 | DIODE-SWITCHING;KDS184,80V,100mA,SOT-23, | 3 | SNA | |
| ....4 | Q101 | 0501-000445 | TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT | 11 | SA | |
| ....4 | CEQ2 | 0505-000110 | FET-SILICON;2N7002,N,60V,115mA,7.5ohm,0. | 6 | SA | |
| ....4 | Q409 | 0505-002560 | FET-SILICON;AO6415,P,-20V,-3.3A,0.15ohm, | 1 | SA | |
| ....4 | Q409 | 0505-002572 | FET-SILICON;AO4801AL,P,-30V,-5.6A,0.075o | 1 | SA | |
| ....4 | T0596 | 0904-002554 | IC-USC;AU6256-JBF,QFN,28P,5x5mm,12MHz,TP | 1 | SA | |
| ....4 | IC106 | 1001-001573 | IC-VIDEO SWITCH;SiI9287BCNUTR,QFN,72P,10 | 1 | SNA | |
| ....4 | | 1006-001266 | IC-LINE TRANSCEIVER;3232,TSSOP,16P,174MI | 1 | SA | |
| ....4 | IC112 | 1103-000129 | IC-EEPROM;24C02,2Kbit,256x8,SOP,8P,5x4mm | 2 | SA | |
| ....4 | IC112 | 1103-001385 | IC-EEPROM;AT24C256,256Kbit,32Kx8,SOP,8P, | 1 | SA | |
| ....4 | | 1105-002058 | IC-DDR2 SDRAM;K4T1G164QE-HCF8,DDR2,1Gbit | 2 | SA | |
| ....4 | T0085 | 1201-002487 | IC-AUDIO AMP;MAX9728A,QFN,12P,3x3mm,DUAL | 1 | SA | |
| ....4 | T0085 | 1201-002849 | IC-AUDIO AMP;DRV603,TSSOP,14P,5x4.4mm,DU | 1 | SA | |
| ....4 | T0124 | 1201-002993 | IC-POWER AMP;TAS5715,HTQFP,48P,7x7mm,DUA | 1 | SA | |
| ....4 | T0087 | 1203-001815 | IC-POSI.FIXED REG.;78M09,TO-252,3P,PLAST | 1 | SA | |
| ....4 | T0087 | 1203-002835 | IC-POSI.FIXED REG.;KIA7805AF,DPAK,3P,6.6 | 1 | SA | |
| ....4 | T0087 | 1203-002898 | IC-POSI.FIXED REG.;G950T45R,T0-252,3P,6. | 1 | SA | |
| ....4 | | 1203-004364 | IC-VOL. DETECTOR;RT9818C-42PV,SOT-23,3P, | 1 | SA | |
| ....4 | T0087 | 1203-005134 | IC-POSI.FIXED REG.;RT9167A-33PB,SOT-23-5 | 1 | SNA | |
| ....4 | | 1203-005559 | IC-BACKLIGHT DRIVER;MP3302DJ,TSOT23,5P,2 | 1 | SA | |
| ....4 | | 1203-006013 | IC-DC/DC CONVERTER;AOZ1031AI,SO-8,8P,4.9 | 2 | SA | |
| ....4 | | 1203-006017 | IC-VOL. DETECTOR;RT9824GJ8,TSOT23,8P,2.9 | 1 | SA | |
| ....4 | T0087 | 1203-006135 | IC-POSI.FIXED REG.;AP1117D-33-GZ-13-89,T | 1 | SA | |
| ....4 | T0087 | 1203-006136 | IC-POSI.FIXED REG.;AP1117D-18-GZ-13-89,T | 1 | SA | |
| ....4 | IC012 | 1203-006138 | IC-POSI.ADJUST REG.;AP1117DGZ-13-89,TO-2 | 1 | SA | |
| ....4 | | 1203-006288 | IC-VOL. DETECTOR;RT9818B-18GV,SOT-23-3,3 | 1 | SA | |
| ....4 | | 1204-003088 | IC-DEMODULATOR;DRX39XYK,PQFN,64P,9x9x0.8 | 1 | SA | |
| ....4 | | 1204-003096 | IC-VIDEO DECODER;HIDTVPRO-SX,PBGA,580P,P | 1 | SA | |
| ....4 | | 1205-003201 | IC-BUS SWITCH;TC7WB125FK,SSOP,8P,2x2.3mm | 2 | SA | |
| ....4 | | 1205-003735 | IC-SWITCH;AP2151WG-7,SOT25,5P,2.9x1.6mm, | 1 | SA | |
| ....4 | | 1405-001185 | VARISTOR;24Vdc,1.6x0.8x0.36mm,TP | 1 | SA | |
| ....4 | | 1405-001233 | VARISTOR;30Vdc,5A,1.6x0.8x0.8mm,TP | 4 | SA | |
| ....4 | | 1405-001271 | VARISTOR;20Vdc,5A,1.0x0.5x0.6mm,TP | 21 | SA | |
| ....4 | PR6 | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608 | 2 | SNA | |
| ....4 | ZR24 | 2007-000109 | R-CHIP;1Mohm,5%,1/10W,TP,1608 | 1 | SA | |
| ....4 | R105 | 2007-000138 | R-CHIP;100ohm,5%,1/16W,TP,1005 | 26 | SA | |
| ....4 | AR49 | 2007-000140 | R-CHIP;1Kohm,5%,1/16W,TP,1005 | 4 | SNA | |
| ....4 | MR306 | 2007-000141 | R-CHIP;2.2Kohm,5%,1/16W,TP,1005 | 12 | SNA | |
| ....4 | R319 | 2007-000143 | R-CHIP;4.7Kohm,5%,1/16W,TP,1005 | 54 | SNA | |
| ....4 | | 2007-000146 | R-CHIP;6.8Kohm,5%,1/16W,TP,1005 | 2 | SA | |
| ....4 | R104 | 2007-000148 | R-CHIP;10Kohm,5%,1/16W,TP,1005 | 39 | SA | |
| ....4 | R102 | 2007-000149 | R-CHIP;12Kohm,5%,1/16W,TP,1005 | 6 | SA | |
| ....4 | MR36 | 2007-000153 | R-CHIP;22Kohm,5%,1/16W,TP,1005 | 8 | SNA | |
| ....4 | AR43 | 2007-000155 | R-CHIP;27Kohm,5%,1/16W,TP,1005 | 2 | SNA | |
| ....4 | RZ07 | 2007-000156 | R-CHIP;30Kohm,5%,1/16W,TP,1005 | 2 | SA | |
| ....4 | MR13 | 2007-000157 | R-CHIP;47Kohm,5%,1/16W,TP,1005 | 2 | SNA | |

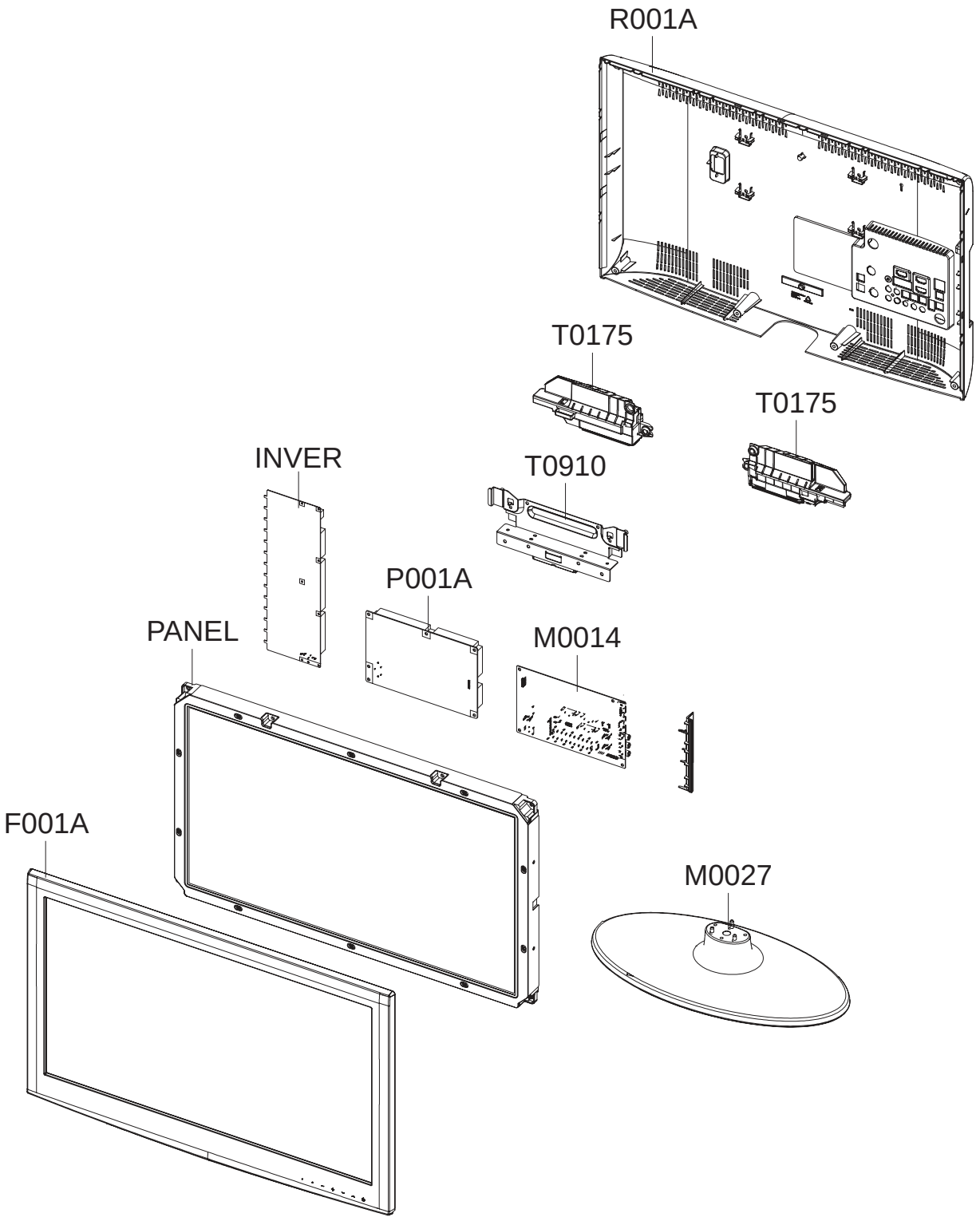
| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|---|---|---|---|---|---|---|
| ....4 | R123 | 2007-000159 | R-CHIP;56Kohm,5%,1/16W,TP,1005 | 1 | SNA | |
| ....4 | DR39 | 2007-000162 | R-CHIP;100Kohm,5%,1/16W,TP,1005 | 2 | SNA | |
| ....4 | MR16 | 2007-000168 | R-CHIP;470Kohm,5%,1/16W,TP,1005 | 2 | SA | |
| ....4 | R111 | 2007-000171 | R-CHIP;0ohm,5%,1/16W,TP,1005 | 13 | SNA | |
| ....4 | HDR17 | 2007-000172 | R-CHIP;10ohm,5%,1/16W,TP,1005 | 9 | SNA | |
| ....4 | R338 | 2007-000173 | R-CHIP;22ohm,5%,1/16W,TP,1005 | 18 | SNA | |
| ....4 | UR23 | 2007-000174 | R-CHIP;47ohm,5%,1/16W,TP,1005 | 2 | SNA | |
| ....4 | R2136 | 2007-000239 | R-CHIP;1.5Kohm,1%,1/10W,TP,1608 | 1 | SNA | |
| ....4 | MR9 | 2007-000455 | R-CHIP;18Kohm,1%,1/10W,TP,1608 | 2 | SA | |
| ....4 | ER13 | 2007-000669 | R-CHIP;2Kohm,1%,1/10W,TP,1608 | 1 | SNA | |
| ....4 | R945 | 2007-000726 | R-CHIP;300ohm,1%,1/10W,TP,1608 | 1 | SA | |
| ....4 | | 2007-000755 | R-CHIP;330Kohm,1%,1/10W,TP,1608 | 1 | SA | |
| ....4 | R124 | 2007-000775 | R-CHIP;33Kohm,5%,1/16W,TP,1005 | 3 | SNA | |
| ....4 | DR37 | 2007-000932 | R-CHIP;470ohm,5%,1/16W,TP,1005 | 4 | SNA | |
| ....4 | PR12 | 2007-000979 | R-CHIP;5.6Kohm,1%,1/10W,TP,1608 | 1 | SA | |
| ....4 | AAR20 | 2007-001002 | R-CHIP;510ohm,5%,1/10W,TP,1608 | 1 | SNA | |
| ....4 | | 2007-001237 | R-CHIP;910ohm,1%,1/10W,TP,1608 | 1 | SNA | |
| ....4 | | 2007-001285 | R-CHIP;5.6ohm,5%,1/16W,TP,1005 | 2 | SA | |
| ....4 | OTR1 | 2007-001292 | R-CHIP;33ohm,5%,1/16W,TP,1005 | 10 | SNA | |
| ....4 | R326 | 2007-001325 | R-CHIP;3.3Kohm,5%,1/16W,TP,1005 | 11 | SNA | |
| ....4 | | 2007-002906 | R-CHIP;200Kohm,1%,1/10W,TP,1608 | 1 | SA | |
| ....4 | TR30 | 2007-007009 | R-CHIP;75ohm,5%,1/16W,TP,1005 | 3 | SA | |
| ....4 | R365 | 2007-007107 | R-CHIP;100Kohm,1%,1/16W,TP,1005 | 2 | SNA | |
| ....4 | | 2007-007134 | R-CHIP;39Kohm,1%,1/16W,TP,1005 | 1 | SA | |
| ....4 | DR4 | 2007-007142 | R-CHIP;10Kohm,1%,1/16W,TP,1005 | 4 | SNA | |
| ....4 | | 2007-007156 | R-CHIP;1ohm,5%,1/16W,TP,1005 | 8 | SA | |
| ....4 | | 2007-007312 | R-CHIP;20Kohm,1%,1/16W,TP,1005 | 3 | SA | |
| ....4 | | 2007-007316 | R-CHIP;3.3Kohm,1%,1/16W,TP,1005 | 1 | SNA | |
| ....4 | | 2007-007318 | R-CHIP;1Kohm,1%,1/16W,TP,1005 | 11 | SNA | |
| ....4 | | 2007-007671 | R-CHIP;11Kohm,1%,1/16W,TP,1005 | 1 | SA | |
| ....4 | | 2007-007861 | R-CHIP;62Kohm,1%,1/16W,TP,1005 | 2 | SA | |
| ....4 | MR11 | 2007-008015 | R-CHIP;75ohm,1%,1/16W,TP,1005 | 9 | SNA | |
| ....4 | | 2007-008134 | R-CHIP;12.4Kohm,1%,1/16W,TP,1005 | 1 | SC | |
| ....4 | | 2007-008298 | R-CHIP;49.9ohm,1%,1/16W,TP,1005 | 4 | SA | |
| ....4 | | 2007-008593 | R-CHIP;750ohm,1%,1/16W,TP,1005 | 1 | SA | |
| ....4 | DRP29 | 2011-001396 | R-NETWORK;4.7Kohm,5%,1/16W,L,CHIP,8P,TP, | 1 | SA | |
| ....4 | | 2011-001427 | R-NETWORK;0ohm,5%,1/16W,L,CHIP,8P,TP,2.0 | 1 | SA | |
| ....4 | | 2011-001449 | R-NETWORK;22ohm,5%,1/16W,L,4P,TP,1010 | 2 | SA | |
| ....4 | | 2011-001527 | R-NETWORK;4.7Kohm,5%,1/16W,L,CHIP,4P,TP, | 3 | SNA | |
| ....4 | | 2011-001585 | R-NETWORK;47ohm,5%,1/16W,L,CHIP-V,4P,TP, | 2 | SNA | |
| ....4 | | 2011-001589 | R-NETWORK;0ohm,5%,1/16W,L,CHIP-V,4P,TP,1 | 4 | SNA | |
| ....4 | DC30 | 2203-000138 | C-CER,CHIP;1.5nF,10%,50V,X7R,TP,1005,- | 2 | SNA | |
| ....4 | PC43 | 2203-000233 | C-CER,CHIP;0.1nF,5%,50V,C0G,TP,1005 | 5 | SA | |
| ....4 | RC34 | 2203-000280 | C-CER,CHIP;0.01nF,0.5pF,50V,C0G,1608 | 2 | SA | |
| ....4 | MC302 | 2203-000425 | C-CER,CHIP;.018nF,5%,50V,C0G,TP,1005 | 4 | SA | |
| ....4 | C254 | 2203-000438 | C-CER,CHIP;1nF,10%,50V,X7R,TP,1005 | 9 | SA | |
| ....4 | C507 | 2203-000489 | C-CER,CHIP;2.2nF,10%,50V,X7R,TP,1005 | 3 | SA | |
| ....4 | ZC14 | 2203-000626 | C-CER,CHIP;0.022nF,5%,50V,C0G,1608 | 2 | SNA | |
| ....4 | AD480 | 2203-000679 | C-CER,CHIP;0.027nF,5%,50V,C0G,1005 | 1 | SA | |
| ....4 | JC31 | 2203-000715 | C-CER,CHIP;3.3nF,10%,50V,X7R,1608 | 4 | SNA | |
| ....4 | DC25 | 2203-000812 | C-CER,CHIP;.033nF,5%,50V,C0G,1005 | 7 | SNA | |

| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|---|---|---|---|---|---|---|
| ....4 | CK40B | 2203-000838 | C-CER,CHIP;0.39NF,5%,50V,C0G,TP,1608 | 1 | SNA | |
| ....4 | KFC6 | 2203-000872 | C-CER,CHIP;0.0030nF,0.25pF,50V,C0G,1608 | 2 | SNA | |
| ....4 | AD480 | 2203-001428 | C-CER,CHIP;470nF,10%,50V,X7R,TP,2012 | 3 | SNA | |
| ....4 | AD480 | 2203-002285 | C-CER,CHIP;10nF,10%,50V,X7R,1005 | 15 | SNA | |
| ....4 | AD480 | 2203-002525 | C-CER,CHIP;0.56nF,10%,50V,X7R,TP,1005 | 10 | SNA | |
| ....4 | AAC1 | 2203-005249 | C-CER,CHIP;100nF,10%,50V,X7R,TP,1608 | 12 | SNA | |
| ....4 | DC9 | 2203-005481 | C-CER,CHIP;47nF,10%,10V,X7R,TP,1005 | 1 | SA | |
| ....4 | AD480 | 2203-005511 | C-CER,CHIP;27nF,10%,10V,X7R,TP,1005 | 1 | SA | |
| ....4 | AD480 | 2203-005968 | C-CER,CHIP;4.7NF,10%,50V,X7R,TP,1005 | 3 | SNA | |
| ....4 | AD480 | 2203-006126 | C-CER,CHIP;47nF,10%,16V,X7R,1005 | 2 | SNA | |
| ....4 | PC11 | 2203-006141 | C-CER,CHIP;1000nF,10%,16V,X5R,1608 | 5 | SNA | |
| ....4 | C102 | 2203-006158 | C-CER,CHIP;100nF,10%,16V,X7R,1005 | 111 | SNA | |
| ....4 | JC10 | 2203-006324 | C-CER,CHIP;2200nF,10%,10V,X5R,1608 | 2 | SA | |
| ....4 | AD480 | 2203-006336 | C-CER,CHIP;10000nF,10%,25V,X5R,3216 | 7 | SA | |
| ....4 | C802 | 2203-006348 | C-CER,CHIP;1000nF,10%,25V,X5R,TP,1608 | 1 | SA | |
| ....4 | C125 | 2203-006361 | C-CER,CHIP;10000nF,10%,10V,X5R,TP,2012 | 58 | SC | |
| ....4 | C234 | 2203-006378 | C-CER,CHIP;4700nF,10%,6.3V,X5R,TP,1608 | 1 | SNA | |
| ....4 | HE4 | 2203-006474 | C-CER,CHIP;22000nF,20%,6.3V,X5R,2012 | 1 | SA | |
| ....4 | HDC11 | 2203-006562 | C-CER,CHIP;1000nF,10%,10V,X5R,TP,1005 | 26 | SNA | |
| ....4 | AD480 | 2203-006824 | C-CER,CHIP;4700nF,10%,10V,X5R,1608 | 2 | SNA | |
| ....4 | AD480 | 2203-006992 | C-CER,CHIP;0.33nF,5%,50V,C0G,TP,1005 | 2 | SNA | |
| ....4 | T0052 | 2703-000158 | INDUCTOR-SMD;1uH,10%,2012 | 4 | SNA | |
| ....4 | T0052 | 2703-000296 | INDUCTOR-SMD;680nH,10%,1608 | 1 | SA | |
| ....4 | VL6 | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225 | 6 | SA | |
| ....4 | L1103 | 2703-000403 | INDUCTOR-SMD;22uH,10%,3225 | 1 | SA | |
| ....4 | T0052 | 2703-001239 | INDUCTOR-SMD;3.3uH,10%,1608 | 3 | SA | |
| ....4 | T0052 | 2703-002268 | INDUCTOR-SMD;8.2nH,5%,1005 | 2 | SNA | |
| ....4 | T0052 | 2703-003149 | INDUCTOR-SMD;2.2uH,20%,5050 | 2 | SA | |
| ....4 | X202 | 2801-003326 | CRYSTAL-SMD;24MHz,30ppm,28-ABX,20pF,50oh | 1 | SA | |
| ....4 | X202 | 2801-004004 | CRYSTAL-SMD;20.25MHz,20ppm,28-AAN,13pF,2 | 1 | SA | |
| ....4 | X202 | 2801-004775 | CRYSTAL-SMD;12MHz,30ppm,16pF,30ohm,TP | 1 | SNA | |
| ....4 | F103 | 2901-001506 | FILTER-EMI SMD;5V,0.13A,0pF,2x1x0.5mm,TP | 2 | SA | |
| ....4 | T0568 | 3301-001082 | BEAD-SMD;60ohm,3225,TP,43ohm/40MHz,83ohm | 1 | SNA | |
| ....4 | T0568 | 3301-001186 | BEAD-SMD;600ohm,3216,2500mA,TP,553ohm/93 | 4 | SA | |
| ....4 | T0568 | 3301-001236 | BEAD-SMD;60ohm,1608 | 7 | SNA | |
| ....4 | T0568 | 3301-002039 | BEAD-SMD;26ohm,1608,TP | 44 | SA | |
| ....4 | T0313 | 3404-001207 | SWITCH-TACT;12V,50mA,160gf,6.2X6.2,SPST | 1 | SA | |
| ....4 | | 3701-001591 | CONNECTOR-HDMI;19P,2ROW,FEMALE,SMD-S,AU | 1 | SNA | |
| ....4 | AC510 | 3708-001150 | CONNECTOR-FPC/FFC/PIC;30P,1mm,SMD-A,SN,Y | 1 | SA | |
| ....4 | HB01A | 3711-005601 | HEADER-BOARD TO CABLE;BOX,8P,1R,2mm,SMD- | 1 | SNA | |
| ....4 | HB01A | 3711-007336 | HEADER-BOARD TO CABLE;B0X,4P,1R,2.5mm,SM | 1 | SA | |
| ....4 | T0077 | BN41-01377A | PCB MAIN;Trident SX1,FR-4,4,1.0,1.2,192x | 1 | SNA | |
| ....4 | | BN97-04127A | ASSY MICOM-SUB2;T-TDT5DAAC-0340.0,L450,A | 1 | SNA | |
| .....5 | | 1107-001818 | IC-NAND FLASH;KFG1G16U2C-DIB6,1024Mbit,6 | 1 | SNA | |
| ....4 | | BN97-04140A | ASSY MICOM-SUB;T-TDT5DEUS-1002,2010.03.1 | 1 | SNA | |
| .....5 | IC115 | 1107-001580 | IC-FLASH MEMORY;MX25L4005,4Mbit,512Kx8,S | 1 | SNA | |
| ....4 | C | 2402-001314 | C-AL,SMD;100uF,20%,16V,WT,TP,6x5.8mm | 1 | SA | |
| ...3 | | 3722-003088 | JACK-USB;4P/1C,NI/PD/AU/SN,GRY,STRAIGHT, | 1 | SA | |
| 0.1 | | BN91-05029F | ASSY SHIELD;LA22C450E1LXL | 1 | SNA | |
| ..2 | W391 | 6003-000275 | SCREW-TAPTYPE;BH,+,B,M3,L10,ZPC(BLK),SWR | 7 | SA | |
| ..2 | M0081 | 6003-001439 | SCREW-TAPTYPE;BH,+,S,M4,L8,ZPC(WHT),SWRC | 1 | SNA | |

| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|---|---|---|---|---|---|---|
| ..2 | P001A | BN44-00370B | AC VSS(I)-LIPS;PSIV680510B,EI22HD_ASM,6. | 1 | SA | |
| ..2 | FL06 | BN96-12447M | ASSY CABLE P-FFC;LA22C450,FFC,1mm PITCH, | 1 | SA | |
| ..2 | CB06A | BN96-12734D | ASSY BRACKET P-PANEL;LC450 22,SO,T0.8,HD | 1 | SNA | |
| ...3 | | BN61-02428K | STUD-PEM;PNA,M4,D8,L24,ZPC(SIL),SUM24L | 1 | SNA | |
| ...3 | AB258 | BN61-06144D | BRACKET-PANEL;LC450_22inch,SECC,0.8,HDLC | 1 | SNA | |
| ...3 | M0115 | BN61-06146A | BRACKET-STAND LINK;SECC,1.6,LC450 22" | 1 | SNA | |
| ..2 | | BN73-00206A | SILICON/RUBBER-GAPPAD;UE40B7000WWXXC,SIL | 1 | SNA | |
| 0.1 | | BN92-05554K | ASSY BOX;LC450 22 | 1 | SNA | |
| ..2 | CCM1 | BH68-00572N | LABEL RATING;15", 17" OEM MONITOR,SIEL,F | 1 | SNA | |
| ..2 | | BN69-04611G | BOX-SET;22LC450,CB,A-01,SW2, ECT40,YEL,W | 1 | SNA | |
| 0.1 | | BN92-05558A | ASSY P/MATERIAL;LC450 22 | 1 | SNA | |
| ..2 | S.N.A | 0203-001100 | TAPE-OPP MASKING;OPP/W75/CLR,T0.075,W75, | 1.48 | SNA | |
| ..2 | T0246 | BN69-04454A | CUSHION-SET;22LC450,EPS,16.7g/l | 1 | SNA | |
| ..2 | T0524 | 6902-001067 | BAG PE;HDPE/NITRON,T0.015/T0.5,W700,L600 | 1 | SNA | |
| 0.1 | ACCE1 | BN92-05759L | ASSY ACCESSORY;LA22C450E1LXL | 1 | SNA | |
| ..2 | | BN96-13181L | ASSY ACCESSORY-MANUAL;LA22C450E1LXL | 1 | SNA | |
| ...3 | | 6801-001523 | CARD-WARRANTY;INDIA,SIEL,ENGLISH,ARTPAPE | 1 | SNA | |
| ...3 | T0524 | 6902-000361 | BAG PE;LDPE,T0.05,W400,L240,TRP,8,2,8.00 | 1 | SNA | |
| ...3 | | AA68-03242M | MANUAL FLYER-MANUAL FLYER-06,SAFETY GUID | 1 | SNA | |
| ...3 | T0511 | BN68-00968F | MANUAL USERS;LA32R81BM/XTL,SIEL,ENGLISH, | 1 | SNA | |
| ...3 | | BN68-01420C | MANUAL FLYER-SAFETY NOTICE FOR ANTENNA;A | 1 | SNA | |
| ...3 | | BN68-02684A | MANUAL USERS-IB;Comm,Samsung,English,Asi | 1 | SNA | |
| ...3 | | BN68-02832B | MANUAL FLYER-STAND GUIDE;LC450(22"),SAMS | 1 | SNA | |
| ..2 | ACCE2 | BN96-13180K | ASSY ACCESSORY-CABLE;NEW MODEL | 1 | SNA | |
| ...3 | T0685 | 4301-000103 | BATTERY-ALKALINE;1.5V,750mAH,LR03,10.5x4 | 2 | SNA | |
| ...3 | | BH83-00343C | CKD;SIEL ONLY,SIEL ONLY,NON UL | 1 | SNA | |
| ...3 | REMO2 | BN59-01010A | REMOCON;TM950,SAMSUNG,20PIN SINGLE,48KEY | 1 | SA | |
| ...3 | M9889 | BN63-01798B | CLOTH-CLEAN;cloth,180,200,sea blue,ToC | 1 | SA | |
| ...3 | | BN96-01800K | ASSY ACCESSORY-SCREW ZIPPER;10 LCD-TV,60 | 1 | SNA | |
| ....4 | T0081 | 6002-001294 | SCREW-TAPPING;BH,+,,M4,L16,ZPC(BLK) | 3 | SA | |
| ....4 | T0524 | 6902-001169 | BAG PE;LDPE,T0.1,W60,L60,Sealing | 1 | SNA | |
| ...3 | T0524 | 6902-000361 | BAG PE;LDPE,T0.05,W400,L240,TRP,8,2,8.00 | 1 | SNA | |
| ...3 | M0254 | AA59-00416B | ANT SHIELD BOX;UGC-AS-003A,PAL-BG,DK,I,M | 1 | SA | |
| ..2 | CB25A | BN96-04960C | ASSY BRACKET P-WALL;LC450 22,SECC | 1 | SNA | |
| ...3 | | 6902-000128 | BAG ZIPPER;LDPE,T0.05,W200,L150,TRP,8,2, | 1 | SNA | |
| ...3 | T0101 | BN61-01162A | BRACKET-WALL;VE15,SECC,2.0 | 1 | SNA | |
| ...3 | | BN68-00850N | MANUAL FLYER-WALL POSITION;LC450 22,SAMS | 1 | SNA | |
| ...3 | T0527 | BN68-00854A | LABEL-CODE;SP20UO,LABEL,T0.5,10*20 | 1 | SNA | |
| ...3 | M0245 | BN96-01272A | ASSY MISC P-SCREW;VE15UO | 1 | SNA | |
| 0.1 | | BN92-05789B | ASSY LABEL;LA22C450E1XXT | 1 | SNA | |
| ..2 | CCM1 | BN68-01176A | LABEL RATING;W/W,SS,PET POLYESTER,T0.05, | 1 | SNA | |
| ..2 | T0527 | AA68-03752B | LABEL-STICKER;WW,ALL,Art Paper(90g),25,3 | 1 | SNA | |

# 5. Exploded View & Part List

## 5-1. LA26C450E1 Exploded View



# 5-2. LA26C450E1 Parts List

| Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|---|---|---|---|---|---|
| F001A | BN96-12732C | ASSY COVER P-FRONT;LC450 26,SO,ABS+PMMA, | 1 | SA | |
| INVER | BN81-04434A | A/S-INV T260XW04 V2;T260XW04 V2 | 1 | SA | |
| M0014 | BN94-03325J | ASSY PCB MAIN;NEW MODEL | 1 | SA | |
| M0027 | BN96-12869A | ASSY STAND P-BASE;LC350 26,ABS+PMMA,HB,B | 1 | SA | |
| P001A | BN44-00338C | DC VSS-LCD TV;PI2632HD_ASM,PSLF121401A,A | 1 | SA | |
| PANEL | BN07-00824A | LCD-PANEL;T260XW04 V2,AU26X42,8bit,26,16 | 1 | SA | |
| R001A | BN96-13305C | ASSY COVER P-REAR;LC450 26,SO,HIPS,HB,BK | 1 | SA | |
| T0175 | BN96-12975A | ASSY SPEAKER P;16ohm,4pin,5W,L:380 R:160 | 1 | SA | |
| T0910 | BN96-12743A | ASSY BRACKET P-STAND LINK;LC450 26,UO,SE | 1 | SNA | |

# 5-2-1. LA26C450E1 Parts List

**Service Bom** (SA: SERVICE AVAILABLE, SNA: SERVICE NOT AVAILABLE)

| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|---|---|---|---|---|---|---|
| 0.1 | | BN90-02427C | ASSY COVER FRONT;LC450 26 | 1 | SNA | |
| ..2 | F001A | BN96-12732C | ASSY COVER P-FRONT;LC450 26,SO,ABS+PMMA, | 1 | SA | |
| ...3 | AB326 | BN61-04661A | BRACKET-STOPPER;L650,SK-5,T0.4,Plating,H | 2 | SNA | |
| ...3 | | BN61-04692A | BOSS-PRIMER;#94,clear,35cps | 0.3 | SNA | |
| ...3 | | BN61-04731B | BOSS-TAPE;AMBER,ACRYL,T1.1,W12.0mm,WHITE | 0.4 | SNA | |
| ...3 | | BN61-06140B | HOLDER-BOSS BOTTOM;LC450 26,ABS,HB,WT003 | 1 | SNA | |
| ...3 | F001 | BN63-06504C | COVER-FRONT;LC450 26,SO,ABS+PMMA,HB,RD00 | 1 | SNA | |
| ...3 | M0125 | BN96-13046D | ASSY BOARD P-TOUCH FUNCTION&IR;LN32C450, | 1 | SA | |
| ...3 | | BN60-00162Y | SPACER-FOAM;FOAM,50000mm,Dark Gray,0.35T | 1.72 | SA | |
| ...3 | | BN68-02554B | LABEL-LCD-POP;L450(32/26),PET,T0.05,100, | 1 | SNA | |
| ...3 | CCM1 | BN63-05199C | COVER-SHEET;AMBER,PE,T0.08,W55mm,200M,CL | 1.6 | SNA | |
| ...3 | CCM1 | BN63-05199E | COVER-SHEET;AMBER,PE,T0.08,W85mm,200M,CL | 0.7 | SNA | |
| ...3 | AD070 | BN64-01260A | DECORATION-BOTTOM;LC450 26,PC CLEAR,V2,T | 1 | SNA | |
| ..2 | T0175 | BN96-12975A | ASSY SPEAKER P;16ohm,4pin,5W,L:380 R:160 | 1 | SA | |
| 0.1 | R001A | BN90-02431C | ASSY COVER REAR;LC450 26 | 1 | SNA | |
| ..2 | T0081 | 6002-001294 | SCREW-TAPPING;BH,+,,M4,L16,ZPC(BLK) | 7 | SA | |
| ..2 | R001A | BN96-13305C | ASSY COVER P-REAR;LC450 26,SO,HIPS,HB,BK | 1 | SA | |
| ...3 | T0101 | BN61-04929A | BRACKET-WALL;26B450,SECC,T1.2 | 4 | SNA | |
| ...3 | R001 | BN63-06506B | COVER-REAR;LC450 26,SO,HIPS,HB,BK0020 | 1 | SNA | |
| ...3 | T0071 | BN64-01268A | INLAY-TERMINAL;LC450 26",PS SHEET,T0.5,E | 1 | SNA | |
| ...3 | T0139 | BN65-00002A | CLAMPER CORE;BORDEAUX,LDPE,BLK | 1 | SNA | |
| 0.1 | M0017 | BN91-05028K | ASSY CHASSIS;LA26C450E1LXL | 1 | SNA | |
| ..2 | M0014 | BN94-03325J | ASSY PCB MAIN;NEW MODEL | 1 | SA | |
| ...3 | | 3701-001480 | CONNECTOR-DSUB;15P,3R,FEMAIL,STAMPED PIN | 1 | SA | |
| ...3 | | 3711-007302 | HEADER-BOARD TO BOARD;BOX,18P,2R,2mm,ANG | 1 | SA | |
| ...3 | T0527 | BN68-00513A | LABEL-E,PASS;ALL MODEL,YUPO(110G),50X15, | 1 | SNA | |
| ...3 | T0527 | BN68-01742A | LABEL;Chip Label,10,16 | 1 | SNA | |
| ...3 | | 3722-003037 | JACK-USB;4P/1C W/L,AU/NI,BLK,ANGLE,A | 1 | SA | |
| ...3 | JA330 | 3722-003038 | JACK-PHONE;7P/1C W/L,SN,BLK | 2 | SA | |
| ...3 | JA333 | 3722-003040 | JACK-PIN;3P W/L,SN,BLK/YEL/WHT/RED,ANGLE | 1 | SA | |
| ...3 | JA333 | 3722-003052 | JACK-PIN;5P+Shield W/L,NI/SN,GN/BL/RD/WH | 2 | SA | |
| ...3 | T0066 | BN62-00040A | HEAT SINK-ES;SAPPHIRE,T2.0,36*36*6.6,BLK | 1 | SNA | |
| ...3 | M0412 | BN96-11826C | ASSY BRACKET P-PCB;LB450 40,SPTE T0.5 + | 1 | SNA | |
| ....4 | | BN61-04928C | BRACKET-SUPPORT PCB;SPTE,T 0.5,SCREW-M4 | 1 | SNA | |
| ....4 | | BN61-05262B | HOLDER-BOSS PCB;52,LB550(EO),PBT+G/F(30% | 1 | SNA | |
| ...3 | | 0202-001608 | SOLDER-WIRE FLUX;LFC7-107,D0.8,99.3Sn/0. | 0.25 | SNA | |
| ...3 | CN906 | 3707-001096 | CONNECTOR-OPTICAL;STRAIGHT W/L,SPDIF | 1 | SA | |
| ...3 | CIS3 | BN40-00173A | TUNER;DTOS40CVL081A,DVB-T/C,164CH,38.9MH | 1 | SA | |
| ...3 | | BN97-04046M | ASSY SMD;NEW MODEL | 1 | SNA | |
| ....4 | | 0202-001767 | SOLDER-CREAM;LST-5710,D20~38,Sn-57Bi-1Ag | 2.221 | SNA | |
| ....4 | DS01A | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO | 21 | SA | |
| ....4 | | 0403-001164 | DIODE-ZENER;MMSZ5232B,5.32-5.88V,500MW,S | 1 | SA | |
| ....4 | | 0403-001783 | DIODE-ZENER;BZB84-C6V2,5.8/6.6V,300mW,SO | 8 | SNA | |
| ....4 | D0254 | 0404-001404 | DIODE-SCHOTTKY;BAT721C,40V,200mA,SOT-23, | 1 | SA | |
| ....4 | T0139 | 0406-001271 | DIODE-TVS;RCLAMP0524P,6/-/-V,150W,SLP251 | 7 | SNA | |
| ....4 | SD3 | 0407-000114 | DIODE-SWITCHING;KDS184,80V,100mA,SOT-23, | 3 | SNA | |
| ....4 | Q101 | 0501-000445 | TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT | 10 | SA | |
| ....4 | CEQ2 | 0505-000110 | FET-SILICON;2N7002,N,60V,115mA,7.5ohm,0. | 6 | SA | |

| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|---|---|---|---|---|---|---|
| ....4 | Q409 | 0505-002560 | FET-SILICON;AO6415,P,-20V,-3.3A,0.15ohm, | 1 | SA | |
| ....4 | T0596 | 0904-002554 | IC-USC;AU6256-JBF,QFN,28P,5x5mm,12MHz,TP | 1 | SA | |
| ....4 | IC106 | 1001-001573 | IC-VIDEO SWITCH;SiI9287BCNUTR,QFN,72P,10 | 1 | SNA | |
| ....4 | | 1006-001266 | IC-LINE TRANSCEIVER;3232,TSSOP,16P,174MI | 1 | SA | |
| ....4 | IC112 | 1103-000129 | IC-EEPROM;24C02,2Kbit,256x8,SOP,8P,5x4mm | 2 | SA | |
| ....4 | IC112 | 1103-001385 | IC-EEPROM;AT24C256,256Kbit,32Kx8,SOP,8P, | 1 | SA | |
| ....4 | | 1105-002058 | IC-DDR2 SDRAM;K4T1G164QE-HCF8,DDR2,1Gbit | 2 | SA | |
| ....4 | T0085 | 1201-002849 | IC-AUDIO AMP;DRV603,TSSOP,14P,5x4.4mm,DU | 1 | SA | |
| ....4 | T0124 | 1201-002993 | IC-POWER AMP;TAS5715,HTQFP,48P,7x7mm,DUA | 1 | SA | |
| ....4 | T0087 | 1203-001815 | IC-POSI.FIXED REG.;78M09,TO-252,3P,PLAST | 1 | SA | |
| ....4 | T0087 | 1203-002835 | IC-POSI.FIXED REG.;KIA7805AF,DPAK,3P,6.6 | 1 | SA | |
| ....4 | T0087 | 1203-002898 | IC-POSI.FIXED REG.;G950T45R,T0-252,3P,6. | 1 | SA | |
| ....4 | | 1203-004364 | IC-VOL. DETECTOR;RT9818C-42PV,SOT-23,3P, | 1 | SA | |
| ....4 | T0087 | 1203-005134 | IC-POSI.FIXED REG.;RT9167A-33PB,SOT-23-5 | 1 | SNA | |
| ....4 | | 1203-005559 | IC-BACKLIGHT DRIVER;MP3302DJ,TSOT23,5P,2 | 1 | SA | |
| ....4 | | 1203-006013 | IC-DC/DC CONVERTER;AOZ1031AI,SO-8,8P,4.9 | 2 | SA | |
| ....4 | | 1203-006017 | IC-VOL. DETECTOR;RT9824GJ8,TSOT23,8P,2.9 | 1 | SA | |
| ....4 | T0087 | 1203-006135 | IC-POSI.FIXED REG.;AP1117D-33-GZ-13-89,T | 1 | SA | |
| ....4 | T0087 | 1203-006136 | IC-POSI.FIXED REG.;AP1117D-18-GZ-13-89,T | 1 | SA | |
| ....4 | IC012 | 1203-006138 | IC-POSI.ADJUST REG.;AP1117DGZ-13-89,TO-2 | 1 | SA | |
| ....4 | | 1203-006288 | IC-VOL. DETECTOR;RT9818B-18GV,SOT-23-3,3 | 1 | SA | |
| ....4 | | 1204-003088 | IC-DEMODULATOR;DRX39XYK,PQFN,64P,9x9x0.8 | 1 | SA | |
| ....4 | | 1204-003096 | IC-VIDEO DECODER;HIDTVPRO-SX,PBGA,580P,P | 1 | SA | |
| ....4 | | 1205-003201 | IC-BUS SWITCH;TC7WB125FK,SSOP,8P,2x2.3mm | 2 | SA | |
| ....4 | | 1205-003735 | IC-SWITCH;AP2151WG-7,SOT25,5P,2.9x1.6mm, | 1 | SA | |
| ....4 | | 1405-001185 | VARISTOR;24Vdc,1.6x0.8x0.36mm,TP | 1 | SA | |
| ....4 | | 1405-001233 | VARISTOR;30Vdc,5A,1.6x0.8x0.8mm,TP | 4 | SA | |
| ....4 | | 1405-001271 | VARISTOR;20Vdc,5A,1.0x0.5x0.6mm,TP | 21 | SA | |
| ....4 | PR6 | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608 | 2 | SNA | |
| ....4 | ZR24 | 2007-000109 | R-CHIP;1Mohm,5%,1/10W,TP,1608 | 1 | SA | |
| ....4 | R105 | 2007-000138 | R-CHIP;100ohm,5%,1/16W,TP,1005 | 29 | SA | |
| ....4 | AR49 | 2007-000140 | R-CHIP;1Kohm,5%,1/16W,TP,1005 | 4 | SNA | |
| ....4 | MR306 | 2007-000141 | R-CHIP;2.2Kohm,5%,1/16W,TP,1005 | 12 | SNA | |
| ....4 | R319 | 2007-000143 | R-CHIP;4.7Kohm,5%,1/16W,TP,1005 | 51 | SNA | |
| ....4 | | 2007-000146 | R-CHIP;6.8Kohm,5%,1/16W,TP,1005 | 2 | SA | |
| ....4 | R104 | 2007-000148 | R-CHIP;10Kohm,5%,1/16W,TP,1005 | 39 | SA | |
| ....4 | R102 | 2007-000149 | R-CHIP;12Kohm,5%,1/16W,TP,1005 | 8 | SA | |
| ....4 | MR36 | 2007-000153 | R-CHIP;22Kohm,5%,1/16W,TP,1005 | 5 | SNA | |
| ....4 | AR43 | 2007-000155 | R-CHIP;27Kohm,5%,1/16W,TP,1005 | 2 | SNA | |
| ....4 | RZ07 | 2007-000156 | R-CHIP;30Kohm,5%,1/16W,TP,1005 | 2 | SA | |
| ....4 | MR13 | 2007-000157 | R-CHIP;47Kohm,5%,1/16W,TP,1005 | 4 | SNA | |
| ....4 | R123 | 2007-000159 | R-CHIP;56Kohm,5%,1/16W,TP,1005 | 1 | SNA | |
| ....4 | DR39 | 2007-000162 | R-CHIP;100Kohm,5%,1/16W,TP,1005 | 2 | SNA | |
| ....4 | MR16 | 2007-000168 | R-CHIP;470Kohm,5%,1/16W,TP,1005 | 2 | SA | |
| ....4 | R111 | 2007-000171 | R-CHIP;0ohm,5%,1/16W,TP,1005 | 13 | SNA | |
| ....4 | HDR17 | 2007-000172 | R-CHIP;10ohm,5%,1/16W,TP,1005 | 11 | SNA | |
| ....4 | R338 | 2007-000173 | R-CHIP;22ohm,5%,1/16W,TP,1005 | 19 | SNA | |
| ....4 | MR9 | 2007-000455 | R-CHIP;18Kohm,1%,1/10W,TP,1608 | 2 | SA | |
| ....4 | ER13 | 2007-000669 | R-CHIP;2Kohm,1%,1/10W,TP,1608 | 1 | SNA | |
| ....4 | R945 | 2007-000726 | R-CHIP;300ohm,1%,1/10W,TP,1608 | 1 | SA | |
| ....4 | | 2007-000755 | R-CHIP;330Kohm,1%,1/10W,TP,1608 | 1 | SA | |

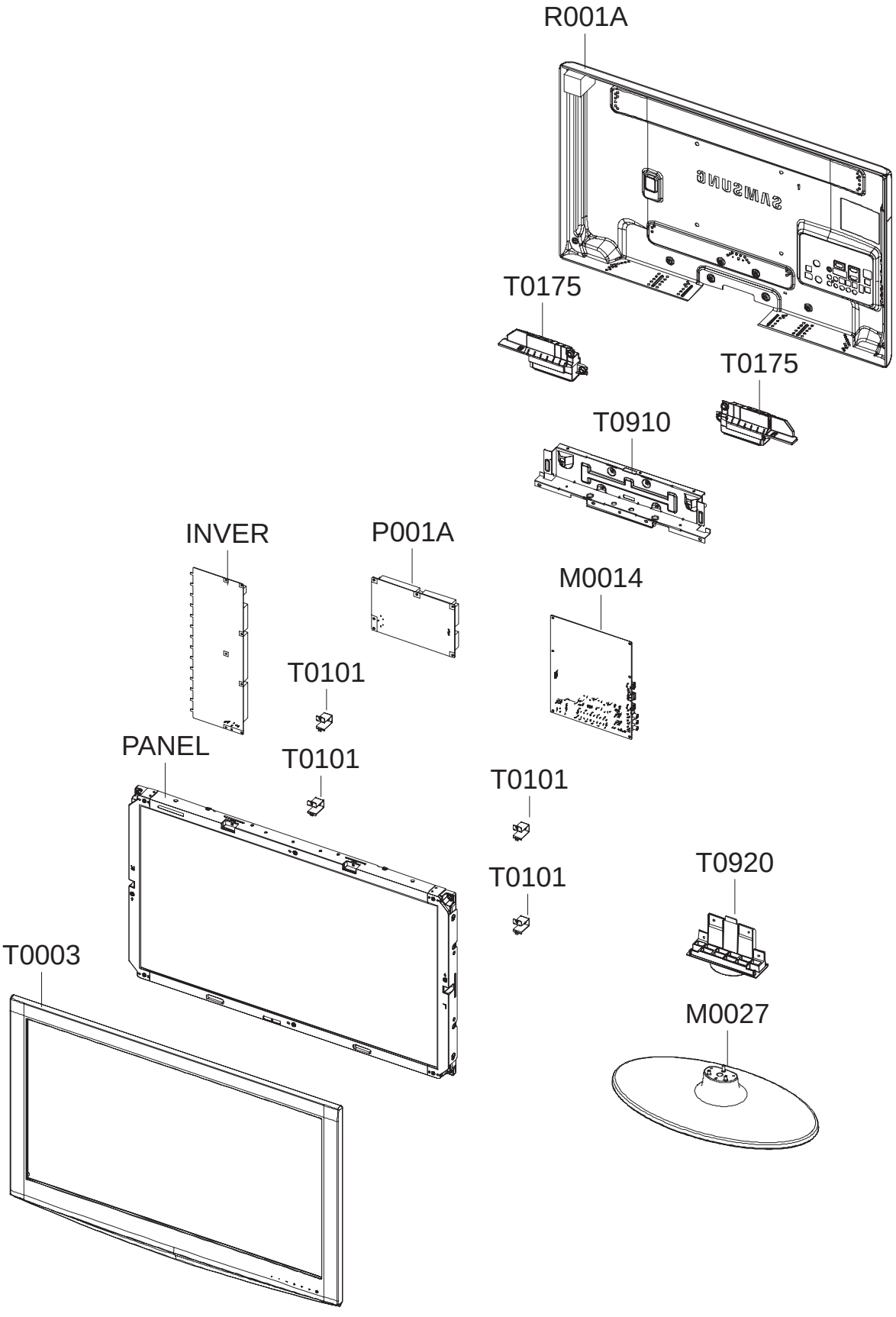
| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|---|---|---|---|---|---|---|
| ....4 | R124 | 2007-000775 | R-CHIP;33Kohm,5%,1/16W,TP,1005 | 3 | SNA | |
| ....4 | DR37 | 2007-000932 | R-CHIP;470ohm,5%,1/16W,TP,1005 | 4 | SNA | |
| ....4 | PR12 | 2007-000979 | R-CHIP;5.6Kohm,1%,1/10W,TP,1608 | 1 | SA | |
| ....4 | AAR20 | 2007-001002 | R-CHIP;510ohm,5%,1/10W,TP,1608 | 1 | SNA | |
| ....4 | | 2007-001237 | R-CHIP;910ohm,1%,1/10W,TP,1608 | 1 | SNA | |
| ....4 | | 2007-001285 | R-CHIP;5.6ohm,5%,1/16W,TP,1005 | 2 | SA | |
| ....4 | OTR1 | 2007-001292 | R-CHIP;33ohm,5%,1/16W,TP,1005 | 10 | SNA | |
| ....4 | R326 | 2007-001325 | R-CHIP;3.3Kohm,5%,1/16W,TP,1005 | 11 | SNA | |
| ....4 | | 2007-002906 | R-CHIP;200Kohm,1%,1/10W,TP,1608 | 3 | SA | |
| ....4 | TR30 | 2007-007009 | R-CHIP;75ohm,5%,1/16W,TP,1005 | 6 | SA | |
| ....4 | R365 | 2007-007107 | R-CHIP;100Kohm,1%,1/16W,TP,1005 | 2 | SNA | |
| ....4 | | 2007-007134 | R-CHIP;39Kohm,1%,1/16W,TP,1005 | 1 | SA | |
| ....4 | DR4 | 2007-007142 | R-CHIP;10Kohm,1%,1/16W,TP,1005 | 4 | SNA | |
| ....4 | | 2007-007156 | R-CHIP;1ohm,5%,1/16W,TP,1005 | 8 | SA | |
| ....4 | | 2007-007312 | R-CHIP;20Kohm,1%,1/16W,TP,1005 | 3 | SA | |
| ....4 | | 2007-007316 | R-CHIP;3.3Kohm,1%,1/16W,TP,1005 | 1 | SNA | |
| ....4 | | 2007-007318 | R-CHIP;1Kohm,1%,1/16W,TP,1005 | 9 | SNA | |
| ....4 | | 2007-007671 | R-CHIP;11Kohm,1%,1/16W,TP,1005 | 1 | SA | |
| ....4 | MR11 | 2007-008015 | R-CHIP;75ohm,1%,1/16W,TP,1005 | 12 | SNA | |
| ....4 | | 2007-008134 | R-CHIP;12.4Kohm,1%,1/16W,TP,1005 | 1 | SC | |
| ....4 | | 2007-008298 | R-CHIP;49.9ohm,1%,1/16W,TP,1005 | 4 | SA | |
| ....4 | | 2007-008593 | R-CHIP;750ohm,1%,1/16W,TP,1005 | 1 | SA | |
| ....4 | DRP29 | 2011-001396 | R-NETWORK;4.7Kohm,5%,1/16W,L,CHIP,8P,TP, | 1 | SA | |
| ....4 | | 2011-001427 | R-NETWORK;0ohm,5%,1/16W,L,CHIP,8P,TP,2.0 | 1 | SA | |
| ....4 | | 2011-001449 | R-NETWORK;22ohm,5%,1/16W,L,4P,TP,1010 | 4 | SA | |
| ....4 | | 2011-001527 | R-NETWORK;4.7Kohm,5%,1/16W,L,CHIP,4P,TP, | 3 | SNA | |
| ....4 | | 2011-001585 | R-NETWORK;47ohm,5%,1/16W,L,CHIP-V,4P,TP, | 2 | SNA | |
| ....4 | | 2011-001589 | R-NETWORK;0ohm,5%,1/16W,L,CHIP-V,4P,TP,1 | 12 | SNA | |
| ....4 | PC43 | 2203-000233 | C-CER,CHIP;0.1nF,5%,50V,C0G,TP,1005 | 5 | SA | |
| ....4 | RC34 | 2203-000280 | C-CER,CHIP;0.01nF,0.5pF,50V,C0G,1608 | 2 | SA | |
| ....4 | MC302 | 2203-000425 | C-CER,CHIP;.018nF,5%,50V,C0G,TP,1005 | 4 | SA | |
| ....4 | C254 | 2203-000438 | C-CER,CHIP;1nF,10%,50V,X7R,TP,1005 | 9 | SA | |
| ....4 | C507 | 2203-000489 | C-CER,CHIP;2.2nF,10%,50V,X7R,TP,1005 | 3 | SA | |
| ....4 | V1233 | 2203-000575 | C-CER,CHIP;220nF,10%,25V,X7R,TP,2012 | 6 | SNA | |
| ....4 | ZC14 | 2203-000626 | C-CER,CHIP;0.022nF,5%,50V,C0G,1608 | 2 | SNA | |
| ....4 | AD480 | 2203-000679 | C-CER,CHIP;0.027nF,5%,50V,C0G,1005 | 1 | SA | |
| ....4 | JC31 | 2203-000715 | C-CER,CHIP;3.3nF,10%,50V,X7R,1608 | 4 | SNA | |
| ....4 | DC25 | 2203-000812 | C-CER,CHIP;.033nF,5%,50V,C0G,1005 | 10 | SNA | |
| ....4 | CK40B | 2203-000838 | C-CER,CHIP;0.39NF,5%,50V,C0G,TP,1608 | 1 | SNA | |
| ....4 | KFC6 | 2203-000872 | C-CER,CHIP;0.0030nF,0.25pF,50V,C0G,1608 | 2 | SNA | |
| ....4 | AD480 | 2203-001428 | C-CER,CHIP;470nF,10%,50V,X7R,TP,2012 | 3 | SNA | |
| ....4 | AD480 | 2203-002285 | C-CER,CHIP;10nF,10%,50V,X7R,1005 | 15 | SNA | |
| ....4 | AD480 | 2203-002525 | C-CER,CHIP;0.56nF,10%,50V,X7R,TP,1005 | 10 | SNA | |
| ....4 | AAC1 | 2203-005249 | C-CER,CHIP;100nF,10%,50V,X7R,TP,1608 | 14 | SNA | |
| ....4 | DC9 | 2203-005481 | C-CER,CHIP;47nF,10%,10V,X7R,TP,1005 | 1 | SA | |
| ....4 | AD480 | 2203-005511 | C-CER,CHIP;27nF,10%,10V,X7R,TP,1005 | 1 | SA | |
| ....4 | AD480 | 2203-005968 | C-CER,CHIP;4.7NF,10%,50V,X7R,TP,1005 | 3 | SNA | |
| ....4 | AD480 | 2203-006126 | C-CER,CHIP;47nF,10%,16V,X7R,1005 | 2 | SNA | |
| ....4 | PC11 | 2203-006141 | C-CER,CHIP;1000nF,10%,16V,X5R,1608 | 5 | SNA | |
| ....4 | C102 | 2203-006158 | C-CER,CHIP;100nF,10%,16V,X7R,1005 | 118 | SNA | |
| ....4 | JC10 | 2203-006324 | C-CER,CHIP;2200nF,10%,10V,X5R,1608 | 2 | SA | |

| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|---|---|---|---|---|---|---|
| ....4 | AD480 | 2203-006336 | C-CER,CHIP;10000nF,10%,25V,X5R,3216 | 7 | SA | |
| ....4 | C125 | 2203-006361 | C-CER,CHIP;10000nF,10%,10V,X5R,TP,2012 | 57 | SC | |
| ....4 | C234 | 2203-006378 | C-CER,CHIP;4700nF,10%,6.3V,X5R,TP,1608 | 1 | SNA | |
| ....4 | HE4 | 2203-006474 | C-CER,CHIP;22000nF,20%,6.3V,X5R,2012 | 1 | SA | |
| ....4 | HDC11 | 2203-006562 | C-CER,CHIP;1000nF,10%,10V,X5R,TP,1005 | 20 | SNA | |
| ....4 | AD480 | 2203-006824 | C-CER,CHIP;4700nF,10%,10V,X5R,1608 | 1 | SNA | |
| ....4 | AD480 | 2203-006841 | C-CER,CHIP;1000nF,10%,16V,X5R,1005 | 1 | SNA | |
| ....4 | AD480 | 2203-006992 | C-CER,CHIP;0.33nF,5%,50V,C0G,TP,1005 | 2 | SNA | |
| ....4 | T0052 | 2703-000158 | INDUCTOR-SMD;1uH,10%,2012 | 4 | SNA | |
| ....4 | T0052 | 2703-000296 | INDUCTOR-SMD;680nH,10%,1608 | 1 | SA | |
| ....4 | VL6 | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225 | 6 | SA | |
| ....4 | L1103 | 2703-000403 | INDUCTOR-SMD;22uH,10%,3225 | 1 | SA | |
| ....4 | T0052 | 2703-001239 | INDUCTOR-SMD;3.3uH,10%,1608 | 3 | SA | |
| ....4 | T0052 | 2703-002268 | INDUCTOR-SMD;8.2nH,5%,1005 | 2 | SNA | |
| ....4 | T0052 | 2703-003149 | INDUCTOR-SMD;2.2uH,20%,5050 | 2 | SA | |
| ....4 | | 2704-000029 | INDUCTOR-SMD-ARRAY;5.6uH,2300mA,2,0.08oh | 2 | SNA | |
| ....4 | X202 | 2801-003326 | CRYSTAL-SMD;24MHz,30ppm,28-ABX,20pF,50oh | 1 | SA | |
| ....4 | X202 | 2801-004004 | CRYSTAL-SMD;20.25MHz,20ppm,28-AAN,13pF,2 | 1 | SA | |
| ....4 | X202 | 2801-004775 | CRYSTAL-SMD;12MHz,30ppm,16pF,30ohm,TP | 1 | SNA | |
| ....4 | F103 | 2901-001506 | FILTER-EMI SMD;5V,0.13A,0pF,2x1x0.5mm,TP | 2 | SA | |
| ....4 | T0568 | 3301-001082 | BEAD-SMD;60ohm,3225,TP,43ohm/40MHz,83ohm | 1 | SNA | |
| ....4 | T0568 | 3301-001236 | BEAD-SMD;60ohm,1608 | 7 | SNA | |
| ....4 | T0568 | 3301-002039 | BEAD-SMD;26ohm,1608,TP | 43 | SA | |
| ....4 | T0313 | 3404-001207 | SWITCH-TACT;12V,50mA,160gf,6.2X6.2,SPST | 1 | SA | |
| ....4 | | 3601-001374 | FUSE-SURFACE MOUNT;32V,5A,FAST-ACTING,Hi | 1 | SNA | |
| ....4 | | 3701-001591 | CONNECTOR-HDMI;19P,2ROW,FEMALE,SMD-S,AU | 2 | SNA | |
| ....4 | | 3701-001693 | CONNECTOR-HDMI;19P,2ROW,FEMALE,SMD-A | 1 | SA | |
| ....4 | AC510 | 3708-001150 | CONNECTOR-FPC/FFC/PIC;30P,1mm,SMD-A,SN,Y | 1 | SA | |
| ....4 | CON_US | 3711-005616 | HEADER-BOARD TO CABLE;BOX,10P,1R,2mm,SMD | 1 | SNA | |
| ....4 | HB01A | 3711-007336 | HEADER-BOARD TO CABLE;B0X,4P,1R,2.5mm,SM | 1 | SA | |
| ....4 | T0077 | BN41-01377A | PCB MAIN;Trident SX1,FR-4,4,1.0,1.2,192x | 1 | SNA | |
| ....4 | | BN97-04127A | ASSY MICOM-SUB2;T-TDT5DAAC-0340.0,L450,A | 1 | SNA | |
| .....5 | | 1107-001818 | IC-NAND FLASH;KFG1G16U2C-DIB6,1024Mbit,6 | 1 | SNA | |
| ....4 | | BN97-04140A | ASSY MICOM-SUB;T-TDT5DEUS-1002,2010.03.1 | 1 | SNA | |
| .....5 | IC115 | 1107-001580 | IC-FLASH MEMORY;MX25L4005,4Mbit,512Kx8,S | 1 | SNA | |
| ....4 | C | 2402-001314 | C-AL,SMD;100uF,20%,16V,WT,TP,6x5.8mm | 1 | SA | |
| 0.1 | | BN91-05029D | ASSY SHIELD;LA26C450E1LXL | 1 | SNA | |
| ..2 | T0081 | 6001-002284 | SCREW-MACHINE;BH,+,M4,L8,ZPC(WHT),SWRCH1 | 8 | SA | |
| ..2 | M0081 | 6003-000337 | SCREW-TAPTYPE;BH,+,S,M4,L10,ZPC(BLK),SWR | 2 | SA | |
| ..2 | M0081 | 6003-001003 | SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR | 4 | SA | |
| ..2 | M2893 | BN39-01274A | LEAD CONNECTOR;LC5F,UL 1007 #26,14P,80mm | 1 | SA | |
| ..2 | P001A | BN44-00338C | DC VSS-LCD TV;PI2632HD_ASM,PSLF121401A,A | 1 | SA | |
| ..2 | M0230 | BN96-12469D | ASSY CABLE P-FFC;LA26C450,FFC,1mm PITCH, | 1 | SA | |
| ..2 | T0910 | BN96-12743A | ASSY BRACKET P-STAND LINK;LC450 26,UO,SE | 1 | SNA | |
| ...3 | | BN61-02429K | STUD-PEM;PNB,M3.8,D7,L14.9,ZPC(SIL),SUM2 | 4 | SNA | |
| ...3 | M0115 | BN61-06142A | BRACKET-STAND LINK;SECC,1.2 | 1 | SNA | |
| ...3 | | BN61-06252A | BRACKET-SUPPORT LINK;SECC,1.2,LC450 26" | 1 | SNA | |
| ...3 | | BN60-00162Y | SPACER-FOAM;FOAM,50000mm,Dark Gray,0.35T | 0.11 | SA | |
| ...3 | | BN61-05281A | HOLDER-CLAMP;LCD,NYLON 66,WHT | 2 | SNA | |
| ..2 | | BN61-06151C | HOLDER-SIDE AV;LC450 26,ZB,ZL,HIPS,HB,BK | 1 | SNA | |
| ..2 | | BN73-00206A | SILICON/RUBBER-GAPPAD;UE40B7000WWXXC,SIL | 1 | SNA | |

| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|---|---|---|---|---|---|---|
| ..2 | M2893 | BN39-01267L | LEAD CONNECTOR;UC4Q,Flat Connector Ass'y | 1 | SA | |
| ..2 | T0081 | 6001-002604 | SCREW-MACHINE;BH,+,M4,L10,ZPC(WHT),SWRCH | 1 | SA | |
| 0.1 | | BN91-05061A | ASSY LCD;BN07-00824A | 1 | SNA | |
| ..2 | PANEL | BN07-00824A | LCD-PANEL;T260XW04 V2,AU26X42,8bit,26,16 | 1 | SA | |
| ...3 | INVER | BN81-04434A | A/S-INV T260XW04 V2;T260XW04 V2 | 1 | SA | |
| 0.1 | | BN92-05529J | ASSY BOX;LC450 26 | 1 | SNA | |
| ..2 | CCM1 | BH68-00572N | LABEL RATING;15", 17" OEM MONITOR,SIEL,F | 1 | SNA | |
| ..2 | | BN69-04636G | BOX-SET;26LC450,CB,A-01,SW2,YEL,W729,D49 | 1 | SNA | |
| 0.1 | | BN92-05533A | ASSY P/MATERIAL;LC450 26 | 1 | SNA | |
| ..2 | S.N.A | 0203-001100 | TAPE-OPP MASKING;OPP/W75/CLR,T0.075,W75, | 1.77 | SNA | |
| ..2 | T0524 | 6902-000996 | BAG PE;HDPE/NITRON,T0.015/T0.5,W800,L600 | 1 | SNA | |
| ..2 | T0246 | BN69-04453A | CUSHION-01,SET;26LC450,EPS,16.7g/l | 1 | SNA | |
| 0.1 | M0216 | BN90-02526A | ASSY STAND;LC350 26 | 1 | SNA | |
| ..2 | M0027 | BN96-12869A | ASSY STAND P-BASE;LC350 26,ABS+PMMA,HB,B | 1 | SA | |
| ...3 | CCM1 | BN63-02183D | COVER-SHEET;Rhcm,PE Vinyl,T0.04,680mm,20 | 0.4 | SNA | |
| ...3 | | BN63-06687A | COVER-STAND BASE;LC350 26,ABS+PMMA,HB,BK | 1 | SNA | |
| ...3 | M0126 | BN73-00052B | RUBBER-FOOT;42Q9,c9,CR Rubber Gray,T3.0 | 5 | SNA | |
| 0.1 | | BN92-06107G | ASSY LABEL;NEW MODEL | 1 | SNA | |
| ..2 | | AA68-03752D | LABEL-STICKER;WW,ALL,Art Paper(90g),44.5 | 1 | SNA | |
| ..2 | CCM1 | BN68-01176A | LABEL RATING;W/W,SS,PET POLYESTER,T0.05, | 1 | SNA | |
| 0.1 | ACCE1 | BN92-06212M | ASSY ACCESSORY;NEW MODEL | 1 | SNA | |
| ..2 | ACCE2 | BN96-14636H | ASSY ACCESSORY-CABLE;NEW MODEL | 1 | SNA | |
| ...3 | T0268 | 3903-000431 | CBF-POWER CORD;DT,IN,DP3/Y(A),IEC320 C13 | 1 | SA | |
| ...3 | T0685 | 4301-000103 | BATTERY-ALKALINE;1.5V,750mAH,LR03,10.5x4 | 2 | SNA | |
| ...3 | T0524 | 6902-000361 | BAG PE;LDPE,T0.05,W400,L240,TRP,8,2,8.00 | 1 | SNA | |
| ...3 | REMO2 | BN59-01010A | REMOCON;TM950,SAMSUNG,20PIN SINGLE,48KEY | 1 | SA | |
| ...3 | M9889 | BN63-01798B | CLOTH-CLEAN;cloth,180,200,sea blue,ToC | 1 | SA | |
| ...3 | | BN96-01800K | ASSY ACCESSORY-SCREW ZIPPER;10 LCD-TV,60 | 1 | SNA | |
| ....4 | T0081 | 6002-001294 | SCREW-TAPPING;BH,+,,M4,L16,ZPC(BLK) | 3 | SA | |
| ....4 | T0524 | 6902-001169 | BAG PE;LDPE,T0.1,W60,L60,Sealing | 1 | SNA | |
| ...3 | M0254 | AA59-00416B | ANT SHIELD BOX;UGC-AS-003A,PAL-BG,DK,I,M | 1 | SA | |
| ..2 | | BN96-14636Q | ASSY ACCESSORY-MANUAL;LA26C450E1LXL | 1 | SNA | |
| ...3 | | 6801-001523 | CARD-WARRANTY;INDIA,SIEL,ENGLISH,ARTPAPE | 1 | SNA | |
| ...3 | T0524 | 6902-000361 | BAG PE;LDPE,T0.05,W400,L240,TRP,8,2,8.00 | 1 | SNA | |
| ...3 | | AA68-03242M | MANUAL FLYER-MANUAL FLYER-06,SAFETY GUID | 1 | SNA | |
| ...3 | T0511 | BN68-00968F | MANUAL USERS;LA32R81BM/XTL,SIEL,ENGLISH, | 1 | SNA | |
| ...3 | | BN68-01420C | MANUAL FLYER-SAFETY NOTICE FOR ANTENNA;A | 1 | SNA | |
| ...3 | | BN68-02684A | MANUAL USERS-IB;Comm,Samsung,English,Asi | 1 | SNA | |
| ...3 | | BN68-02765B | MANUAL FLYER-STAND GUIDE;L450(26~32),SAM | 1 | SNA | |

# 5. Exploded View & Part List

## 5-1. LA32C450E1 Exploded View



# 5-2. LA32C450E1 Parts List

| Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|---|---|---|---|---|---|
| INVER | BN90-02432R | ASSY COVER REAR;LC450 32 | 1 | SNA | |
| M0014 | BN81-04166A | A/S-INVERTER LTF320AP08;LTF320AP08 | 1 | SA | |
| M0027 | BN94-03485D | ASSY PCB MAIN;MODEL | 1 | SA | |
| P001A | BN96-12870A | ASSY STAND P-BASE;LC350 32,ABS+PMMA,HB,B | 1 | SA | |
| PANEL | BN44-00338C | DC VSS-LCD TV;PI2632HD_ASM,PSLF121401A,A | 1 | SA | |
| R001A | BN07-00807A | LCD-PANEL;LTF320AP08,SSCYPZ,8bit,32,16.7 | 1 | SA | |
| T0003 | BN96-12733C | ASSY COVER P-FRONT;LC450 32,SO,ABS+PMMA, | 1 | SA | |
| T0101 | BN61-05996A | BRACKET-WALL;LC650 40,SECC,T1.2 | 4 | SNA | |
| T0175 | BN96-12871A | ASSY SPEAKER P;6ohm,4pin,10W,L:530 R:170 | 1 | SA | |
| T0910 | BN96-13341A | ASSY BRACKET P-STAND LINK;LC530 32,SECC, | 1 | SNA | |
| T0920 | BN61-06139B | GUIDE-STAND;LC450 32,ABS HB,BK0020 | 1 | SA | |

# 5-2-1. LA32C450E1 Parts List

**Service Bom** (SA: SERVICE AVAILABLE, SNA: SERVICE NOT AVAILABLE)

| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|---|---|---|---|---|---|---|
| 0.1 | | BN90-02428C | ASSY COVER FRONT;LC450 32 | 1 | SNA | |
| ..2 | T0003 | BN96-12733C | ASSY COVER P-FRONT;LC450 32,SO,ABS+PMMA, | 1 | SA | |
| ...3 | W391 | 6003-000275 | SCREW-TAPTYPE;BH,+,B,M3,L10,ZPC(BLK),SWR | 4 | SA | |
| ...3 | M0081 | 6003-001003 | SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR | 4 | SA | |
| ...3 | AB326 | BN61-04661A | BRACKET-STOPPER;L650,SK-5,T0.4,Plating,H | 2 | SNA | |
| ...3 | | BN61-04692A | BOSS-PRIMER;#94,clear,35cps | 0.3 | SNA | |
| ...3 | | BN61-04731B | BOSS-TAPE;AMBER,ACRYL,T1.1,W12.0mm,WHITE | 0.5 | SNA | |
| ...3 | | BN61-06138A | HOLDER-BOSS BOTTOM;LC450 32,ABS,HB,WT003 | 1 | SNA | |
| ...3 | M0112 | BN63-06502C | COVER-FRONT;LC450 32,SO,ABS+PMMA,HB,RD00 | 1 | SNA | |
| ...3 | M0006 | BN63-06503A | COVER-REAR SUB;LC450 32,HIPS,HB,BK0020 | 1 | SNA | |
| ...3 | M0125 | BN96-13046D | ASSY BOARD P-TOUCH FUNCTION&IR;LN32C450, | 1 | SA | |
| ...3 | | BN60-00162Y | SPACER-FOAM;FOAM,50000mm,Dark Gray,0.35T | 2.18 | SA | |
| ...3 | | BN68-02554B | LABEL-LCD-POP;L450(32/26),PET,T0.05,100, | 1 | SNA | |
| ...3 | CCM1 | BN63-05199B | COVER-SHEET;AMBER,PE,T0.08,W65mm,200M,CL | 2 | SNA | |
| ...3 | CCM1 | BN63-05199F | COVER-SHEET;AMBER,PE,T0.08,W95mm,200M,CL | 0.85 | SNA | |
| ...3 | AD070 | BN64-01259A | DECORATION-BOTTOM;LC450 32,PC CLEAR,V2,T | 1 | SNA | |
| ..2 | T0175 | BN96-12871A | ASSY SPEAKER P;6ohm,4pin,10W,L:530 R:170 | 1 | SA | |
| 0.1 | | BN91-04885A | ASSY LCD-AMLCD;BN07-00807A | 1 | SNA | |
| ..2 | PANEL | BN07-00807A | LCD-PANEL;LTF320AP08,SSCYPZ,8bit,32,16.7 | 1 | SA | |
| ...3 | INVER | BN81-04166A | A/S-INVERTER LTF320AP08;LTF320AP08 | 1 | SA | |
| 0.1 | | BN91-05029E | ASSY SHIELD;LA32C450E1LXL | 1 | SNA | |
| ..2 | T0081 | 6001-002284 | SCREW-MACHINE;BH,+,M4,L8,ZPC(WHT),SWRCH1 | 7 | SA | |
| ..2 | M0081 | 6003-000337 | SCREW-TAPTYPE;BH,+,S,M4,L10,ZPC(BLK),SWR | 6 | SA | |
| ..2 | M0081 | 6003-001003 | SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR | 7 | SA | |
| ..2 | M2893 | BN39-01267A | LEAD CONNECTOR;LA32B450,UL 2651 AWG#26,1 | 1 | SA | |
| ..2 | M2893 | BN39-01274A | LEAD CONNECTOR;LC5F,UL 1007 #26,14P,80mm | 1 | SA | |
| ..2 | P001A | BN44-00338C | DC VSS-LCD TV;PI2632HD_ASM,PSLF121401A,A | 1 | SA | |
| ..2 | M0523 | BN96-12973A | ASSY BRACKET P-WALL;32,37,40,LC650,SECC, | 4 | SNA | |
| ...3 | T0101 | BN61-05996A | BRACKET-WALL;LC650 40,SECC,T1.2 | 4 | SNA | |
| ...3 | | BN60-00188B | SPACER-FOAM;LCD,FELT,20,3.0,20,Center : | 4 | SNA | |
| ..2 | M0230 | BN96-13227A | ASSY CABLE P-FFC;LA32C450,FFC,1mm PITCH, | 1 | SA | |
| ..2 | T0920 | BN61-06139B | GUIDE-STAND;LC450 32,ABS HB,BK0020 | 1 | SA | |
| ..2 | T0081 | 6001-002604 | SCREW-MACHINE;BH,+,M4,L10,ZPC(WHT),SWRCH | 2 | SA | |
| ..2 | | BN61-06441A | HOLDER-INLET;LC530,ABS,V0 | 1 | SNA | |
| ..2 | T0910 | BN96-13341A | ASSY BRACKET P-STAND LINK;LC530 32,SECC, | 1 | SNA | |
| ...3 | M0115 | BN61-06024A | BRACKET-STAND LINK;LC550 32",SECC,T1.2 | 1 | SNA | |
| ...3 | | BN61-02429K | STUD-PEM;PNB,M3.8,D7,L14.9,ZPC(SIL),SUM2 | 4 | SNA | |
| ...3 | | BN61-05281A | HOLDER-CLAMP;LCD,NYLON 66,WHT | 2 | SNA | |
| ..2 | M0254 | BN61-06066A | HOLDER-SIDE AV;LC550,PC+ABS,V0,BK0008 | 1 | SNA | |
| ..2 | | BN73-00206A | SILICON/RUBBER-GAPPAD;UE40B7000WWXXC,SIL | 1 | SNA | |
| 0.1 | | BN92-05530K | ASSY BOX;LC450 32 | 1 | SNA | |
| ..2 | CCM1 | BH68-00572N | LABEL RATING;15", 17" OEM MONITOR,SIEL,F | 1 | SNA | |
| ..2 | | BN69-04612G | BOX-SET;32LC450,CB,A-01,SW2,YEL,W1008,D1 | 1 | SNA | |
| 0.1 | | BN92-05534A | ASSY P/MATERIAL;LC450 32 | 1 | SNA | |
| ..2 | S.N.A | 0203-001100 | TAPE-OPP MASKING;OPP/W75/CLR,T0.075,W75, | 2.32 | SNA | |
| ..2 | T0524 | 6902-000519 | BAG PE;HDPE/NITRON,T0.015/T0.05(DOUBLE), | 1 | SNA | |
| ..2 | T0246 | BN69-04452A | CUSHION-SET;LC450 32",EPS | 1 | SNA | |
| ..2 | | BN68-02422B | LABEL-WARNING SHIPPING;ALL MODEL,A/P 100 | 1 | SNA | |

| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|---|---|---|---|---|---|---|
| 0.1 | ACCE1 | BN92-05759X | ASSY ACCESSORY;LA26C450E1LXL | 1 | SNA | |
| ..2 | | BN96-13181X | ASSY ACCESSORY-MANUAL;LA26C450E1LXL | 1 | SNA | |
| ...3 | | 6801-001523 | CARD-WARRANTY;INDIA,SIEL,ENGLISH,ARTPAPE | 1 | SNA | |
| ...3 | T0524 | 6902-000361 | BAG PE;LDPE,T0.05,W400,L240,TRP,8,2,8.00 | 1 | SNA | |
| ...3 | | AA68-03242M | MANUAL FLYER-MANUAL FLYER-06,SAFETY GUID | 1 | SNA | |
| ...3 | T0511 | BN68-00968F | MANUAL USERS;LA32R81BM/XTL,SIEL,ENGLISH, | 1 | SNA | |
| ...3 | | BN68-01420C | MANUAL FLYER-SAFETY NOTICE FOR ANTENNA;A | 1 | SNA | |
| ...3 | | BN68-02684A | MANUAL USERS-IB;Comm,Samsung,English,Asi | 1 | SNA | |
| ...3 | | BN68-02765B | MANUAL FLYER-STAND GUIDE;L450(26~32),SAM | 1 | SNA | |
| ..2 | ACCE2 | BN96-13180E | ASSY ACCESSORY-CABLE;LA22C450E1LXL | 1 | SNA | |
| ...3 | T0685 | 4301-000103 | BATTERY-ALKALINE;1.5V,750mAH,LR03,10.5x4 | 2 | SNA | |
| ...3 | M0254 | AA59-00416B | ANT SHIELD BOX;UGC-AS-003A,PAL-BG,DK,I,M | 1 | SA | |
| ...3 | REMO2 | BN59-01010A | REMOCON;TM950,SAMSUNG,20PIN SINGLE,48KEY | 1 | SA | |
| ...3 | M9889 | BN63-01798B | CLOTH-CLEAN;cloth,180,200,sea blue,ToC | 1 | SA | |
| ...3 | | BN96-01800K | ASSY ACCESSORY-SCREW ZIPPER;10 LCD-TV,60 | 1 | SNA | |
| ....4 | T0081 | 6002-001294 | SCREW-TAPPING;BH,+,,M4,L16,ZPC(BLK) | 3 | SA | |
| ....4 | T0524 | 6902-001169 | BAG PE;LDPE,T0.1,W60,L60,Sealing | 1 | SNA | |
| ...3 | T0268 | 3903-000431 | CBF-POWER CORD;DT,IN,DP3/Y(A),IEC320 C13 | 1 | SA | |
| ...3 | T0524 | 6902-000361 | BAG PE;LDPE,T0.05,W400,L240,TRP,8,2,8.00 | 1 | SNA | |
| 0.1 | M0216 | BN90-02527A | ASSY STAND;LC350 32 | 1 | SNA | |
| ..2 | M0027 | BN96-12870A | ASSY STAND P-BASE;LC350 32,ABS+PMMA,HB,B | 1 | SA | |
| ...3 | CCM1 | BN63-02183D | COVER-SHEET;Rhcm,PE Vinyl,T0.04,680mm,20 | 0.4 | SNA | |
| ...3 | | BN63-06688A | COVER-STAND BASE;LC350 32,ABS+PMMA,HB,BK | 1 | SNA | |
| ...3 | M0126 | BN73-00052B | RUBBER-FOOT;42Q9,c9,CR Rubber Gray,T3.0 | 5 | SNA | |
| 0.1 | R001A | BN90-02432R | ASSY COVER REAR;LC450 32 | 1 | SNA | |
| ..2 | M0081 | 6003-001003 | SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR | 13 | SA | |
| ..2 | R001A | BN96-12737P | ASSY COVER P-REAR;LC450 32,SO,PCM T0.5,B | 1 | SA | |
| ...3 | R001 | BN63-06392D | COVER-REAR;32,LC550,SO,PCM,T0.5,BLK | 1 | SNA | |
| ...3 | | BN60-00162X | SPACER-FOAM;FOAM,30000mm,Dark Gray,1T,15 | 1.77 | SNA | |
| ...3 | AH358 | BN61-06544A | HOLDER-REAR;LC650 32,PP,BLK | 1 | SNA | |
| ...3 | | BN64-01270X | INLAY-AV;LC450 32,ZB/ZL,PS SHEET,T0.3 | 1 | SNA | |
| ...3 | T0071 | BN64-01298A | INLAY-TERMINAL;LC550,PS SHEET,T0.5,ASIA | 1 | SNA | |
| ...3 | T0139 | BN65-00003A | CLAMPER BAG;42C7,LDPE,HB,BLK | 1 | SNA | |
| 0.1 | M0017 | BN91-05474D | ASSY CHASSIS;MODEL | 1 | SNA | |
| ..2 | M0014 | BN94-03485D | ASSY PCB MAIN;MODEL | 1 | SA | |
| ...3 | | 0202-001608 | SOLDER-WIRE FLUX;LFC7-107,D0.8,99.3Sn/0. | 0.25 | SNA | |
| ...3 | | 3701-001480 | CONNECTOR-DSUB;15P,3R,FEMAIL,STAMPED PIN | 1 | SA | |
| ...3 | CN906 | 3707-001096 | CONNECTOR-OPTICAL;STRAIGHT W/L,SPDIF | 1 | SA | |
| ...3 | | 3711-007302 | HEADER-BOARD TO BOARD;BOX,18P,2R,2mm,ANG | 1 | SA | |
| ...3 | | 3722-003037 | JACK-USB;4P/1C W/L,AU/NI,BLK,ANGLE,A | 1 | SA | |
| ...3 | JA330 | 3722-003038 | JACK-PHONE;7P/1C W/L,SN,BLK | 2 | SA | |
| ...3 | JA333 | 3722-003040 | JACK-PIN;3P W/L,SN,BLK/YEL/WHT/RED,ANGLE | 1 | SA | |
| ...3 | JA333 | 3722-003052 | JACK-PIN;5P+Shield W/L,NI/SN,GN/BL/RD/WH | 2 | SA | |
| ...3 | CIS3 | BN40-00173A | TUNER;DTOS40CVL081A,DVB-T/C,164CH,38.9MH | 1 | SA | |
| ...3 | T0066 | BN62-00040A | HEAT SINK-ES;SAPPHIRE,T2.0,36*36*6.6,BLK | 1 | SNA | |
| ...3 | T0527 | BN68-00513A | LABEL-E,PASS;ALL MODEL,YUPO(110G),50X15, | 1 | SNA | |
| ...3 | T0527 | BN68-01742A | LABEL;Chip Label,10,16 | 1 | SNA | |
| ...3 | M0412 | BN96-11826C | ASSY BRACKET P-PCB;LB450 40,SPTE T0.5 + | 1 | SNA | |
| ....4 | | BN61-04928C | BRACKET-SUPPORT PCB;SPTE,T 0.5,SCREW-M4 | 1 | SNA | |
| ....4 | | BN61-05262B | HOLDER-BOSS PCB;52,LB550(EO),PBT+G/F(30% | 1 | SNA | |
| ...3 | | BN97-04046M | ASSY SMD;NEW MODEL | 1 | SNA | |

| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|---|---|---|---|---|---|---|
| ....4 | | 0202-001767 | SOLDER-CREAM;LST-5710,D20~38,Sn-57Bi-1Ag | 2.221 | SNA | |
| ....4 | DS01A | 0401-001056 | DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO | 21 | SA | |
| ....4 | | 0403-001164 | DIODE-ZENER;MMSZ5232B,5.32-5.88V,500MW,S | 1 | SA | |
| ....4 | | 0403-001783 | DIODE-ZENER;BZB84-C6V2,5.8/6.6V,300mW,SO | 8 | SNA | |
| ....4 | D0254 | 0404-001404 | DIODE-SCHOTTKY;BAT721C,40V,200mA,SOT-23, | 1 | SA | |
| ....4 | T0139 | 0406-001271 | DIODE-TVS;RCLAMP0524P,6/-/-V,150W,SLP251 | 7 | SNA | |
| ....4 | SD3 | 0407-000114 | DIODE-SWITCHING;KDS184,80V,100mA,SOT-23, | 3 | SNA | |
| ....4 | Q101 | 0501-000445 | TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT | 10 | SA | |
| ....4 | CEQ2 | 0505-000110 | FET-SILICON;2N7002,N,60V,115mA,7.5ohm,0. | 6 | SA | |
| ....4 | Q409 | 0505-002560 | FET-SILICON;AO6415,P,-20V,-3.3A,0.15ohm, | 1 | SA | |
| ....4 | T0596 | 0904-002554 | IC-USC;AU6256-JBF,QFN,28P,5x5mm,12MHz,TP | 1 | SA | |
| ....4 | IC106 | 1001-001573 | IC-VIDEO SWITCH;SiI9287BCNUTR,QFN,72P,10 | 1 | SNA | |
| ....4 | | 1006-001266 | IC-LINE TRANSCEIVER;3232,TSSOP,16P,174MI | 1 | SA | |
| ....4 | IC112 | 1103-000129 | IC-EEPROM;24C02,2Kbit,256x8,SOP,8P,5x4mm | 2 | SA | |
| ....4 | IC112 | 1103-001385 | IC-EEPROM;AT24C256,256Kbit,32Kx8,SOP,8P, | 1 | SA | |
| ....4 | | 1105-002058 | IC-DDR2 SDRAM;K4T1G164QE-HCF8,DDR2,1Gbit | 2 | SA | |
| ....4 | T0085 | 1201-002849 | IC-AUDIO AMP;DRV603,TSSOP,14P,5x4.4mm,DU | 1 | SA | |
| ....4 | T0124 | 1201-002993 | IC-POWER AMP;TAS5715,HTQFP,48P,7x7mm,DUA | 1 | SA | |
| ....4 | T0087 | 1203-001815 | IC-POSI.FIXED REG.;78M09,TO-252,3P,PLAST | 1 | SA | |
| ....4 | T0087 | 1203-002835 | IC-POSI.FIXED REG.;KIA7805AF,DPAK,3P,6.6 | 1 | SA | |
| ....4 | T0087 | 1203-002898 | IC-POSI.FIXED REG.;G950T45R,T0-252,3P,6. | 1 | SA | |
| ....4 | | 1203-004364 | IC-VOL. DETECTOR;RT9818C-42PV,SOT-23,3P, | 1 | SA | |
| ....4 | T0087 | 1203-005134 | IC-POSI.FIXED REG.;RT9167A-33PB,SOT-23-5 | 1 | SNA | |
| ....4 | | 1203-005559 | IC-BACKLIGHT DRIVER;MP3302DJ,TSOT23,5P,2 | 1 | SA | |
| ....4 | | 1203-006013 | IC-DC/DC CONVERTER;AOZ1031AI,SO-8,8P,4.9 | 2 | SA | |
| ....4 | | 1203-006017 | IC-VOL. DETECTOR;RT9824GJ8,TSOT23,8P,2.9 | 1 | SA | |
| ....4 | T0087 | 1203-006135 | IC-POSI.FIXED REG.;AP1117D-33-GZ-13-89,T | 1 | SA | |
| ....4 | T0087 | 1203-006136 | IC-POSI.FIXED REG.;AP1117D-18-GZ-13-89,T | 1 | SA | |
| ....4 | IC012 | 1203-006138 | IC-POSI.ADJUST REG.;AP1117DGZ-13-89,TO-2 | 1 | SA | |
| ....4 | | 1203-006288 | IC-VOL. DETECTOR;RT9818B-18GV,SOT-23-3,3 | 1 | SA | |
| ....4 | | 1204-003088 | IC-DEMODULATOR;DRX39XYK,PQFN,64P,9x9x0.8 | 1 | SA | |
| ....4 | | 1204-003096 | IC-VIDEO DECODER;HIDTVPRO-SX,PBGA,580P,P | 1 | SA | |
| ....4 | | 1205-003201 | IC-BUS SWITCH;TC7WB125FK,SSOP,8P,2x2.3mm | 2 | SA | |
| ....4 | | 1205-003735 | IC-SWITCH;AP2151WG-7,SOT25,5P,2.9x1.6mm, | 1 | SA | |
| ....4 | | 1405-001185 | VARISTOR;24Vdc,1.6x0.8x0.36mm,TP | 1 | SA | |
| ....4 | | 1405-001233 | VARISTOR;30Vdc,5A,1.6x0.8x0.8mm,TP | 4 | SA | |
| ....4 | | 1405-001271 | VARISTOR;20Vdc,5A,1.0x0.5x0.6mm,TP | 21 | SA | |
| ....4 | PR6 | 2007-000072 | R-CHIP;47ohm,5%,1/10W,TP,1608 | 2 | SNA | |
| ....4 | ZR24 | 2007-000109 | R-CHIP;1Mohm,5%,1/10W,TP,1608 | 1 | SA | |
| ....4 | R105 | 2007-000138 | R-CHIP;100ohm,5%,1/16W,TP,1005 | 29 | SA | |
| ....4 | AR49 | 2007-000140 | R-CHIP;1Kohm,5%,1/16W,TP,1005 | 4 | SNA | |
| ....4 | MR306 | 2007-000141 | R-CHIP;2.2Kohm,5%,1/16W,TP,1005 | 12 | SNA | |
| ....4 | R319 | 2007-000143 | R-CHIP;4.7Kohm,5%,1/16W,TP,1005 | 51 | SNA | |
| ....4 | | 2007-000146 | R-CHIP;6.8Kohm,5%,1/16W,TP,1005 | 2 | SA | |
| ....4 | R104 | 2007-000148 | R-CHIP;10Kohm,5%,1/16W,TP,1005 | 39 | SA | |
| ....4 | R102 | 2007-000149 | R-CHIP;12Kohm,5%,1/16W,TP,1005 | 8 | SA | |
| ....4 | MR36 | 2007-000153 | R-CHIP;22Kohm,5%,1/16W,TP,1005 | 5 | SNA | |
| ....4 | AR43 | 2007-000155 | R-CHIP;27Kohm,5%,1/16W,TP,1005 | 2 | SNA | |
| ....4 | RZ07 | 2007-000156 | R-CHIP;30Kohm,5%,1/16W,TP,1005 | 2 | SA | |
| ....4 | MR13 | 2007-000157 | R-CHIP;47Kohm,5%,1/16W,TP,1005 | 4 | SNA | |
| ....4 | R123 | 2007-000159 | R-CHIP;56Kohm,5%,1/16W,TP,1005 | 1 | SNA | |

| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|---|---|---|---|---|---|---|
| ....4 | DR39 | 2007-000162 | R-CHIP;100Kohm,5%,1/16W,TP,1005 | 2 | SNA | |
| ....4 | MR16 | 2007-000168 | R-CHIP;470Kohm,5%,1/16W,TP,1005 | 2 | SA | |
| ....4 | R111 | 2007-000171 | R-CHIP;0ohm,5%,1/16W,TP,1005 | 13 | SNA | |
| ....4 | HDR17 | 2007-000172 | R-CHIP;10ohm,5%,1/16W,TP,1005 | 11 | SNA | |
| ....4 | R338 | 2007-000173 | R-CHIP;22ohm,5%,1/16W,TP,1005 | 19 | SNA | |
| ....4 | MR9 | 2007-000455 | R-CHIP;18Kohm,1%,1/10W,TP,1608 | 2 | SA | |
| ....4 | ER13 | 2007-000669 | R-CHIP;2Kohm,1%,1/10W,TP,1608 | 1 | SNA | |
| ....4 | R945 | 2007-000726 | R-CHIP;300ohm,1%,1/10W,TP,1608 | 1 | SA | |
| ....4 | | 2007-000755 | R-CHIP;330Kohm,1%,1/10W,TP,1608 | 1 | SA | |
| ....4 | R124 | 2007-000775 | R-CHIP;33Kohm,5%,1/16W,TP,1005 | 3 | SNA | |
| ....4 | DR37 | 2007-000932 | R-CHIP;470ohm,5%,1/16W,TP,1005 | 4 | SNA | |
| ....4 | PR12 | 2007-000979 | R-CHIP;5.6Kohm,1%,1/10W,TP,1608 | 1 | SA | |
| ....4 | AAR20 | 2007-001002 | R-CHIP;510ohm,5%,1/10W,TP,1608 | 1 | SNA | |
| ....4 | | 2007-001237 | R-CHIP;910ohm,1%,1/10W,TP,1608 | 1 | SNA | |
| ....4 | | 2007-001285 | R-CHIP;5.6ohm,5%,1/16W,TP,1005 | 2 | SA | |
| ....4 | OTR1 | 2007-001292 | R-CHIP;33ohm,5%,1/16W,TP,1005 | 10 | SNA | |
| ....4 | R326 | 2007-001325 | R-CHIP;3.3Kohm,5%,1/16W,TP,1005 | 11 | SNA | |
| ....4 | | 2007-002906 | R-CHIP;200Kohm,1%,1/10W,TP,1608 | 3 | SA | |
| ....4 | TR30 | 2007-007009 | R-CHIP;75ohm,5%,1/16W,TP,1005 | 6 | SA | |
| ....4 | R365 | 2007-007107 | R-CHIP;100Kohm,1%,1/16W,TP,1005 | 2 | SNA | |
| ....4 | | 2007-007134 | R-CHIP;39Kohm,1%,1/16W,TP,1005 | 1 | SA | |
| ....4 | DR4 | 2007-007142 | R-CHIP;10Kohm,1%,1/16W,TP,1005 | 4 | SNA | |
| ....4 | | 2007-007156 | R-CHIP;1ohm,5%,1/16W,TP,1005 | 8 | SA | |
| ....4 | | 2007-007312 | R-CHIP;20Kohm,1%,1/16W,TP,1005 | 3 | SA | |
| ....4 | | 2007-007316 | R-CHIP;3.3Kohm,1%,1/16W,TP,1005 | 1 | SNA | |
| ....4 | | 2007-007318 | R-CHIP;1Kohm,1%,1/16W,TP,1005 | 9 | SNA | |
| ....4 | | 2007-007671 | R-CHIP;11Kohm,1%,1/16W,TP,1005 | 1 | SA | |
| ....4 | MR11 | 2007-008015 | R-CHIP;75ohm,1%,1/16W,TP,1005 | 12 | SNA | |
| ....4 | | 2007-008134 | R-CHIP;12.4Kohm,1%,1/16W,TP,1005 | 1 | SC | |
| ....4 | | 2007-008298 | R-CHIP;49.9ohm,1%,1/16W,TP,1005 | 4 | SA | |
| ....4 | | 2007-008593 | R-CHIP;750ohm,1%,1/16W,TP,1005 | 1 | SA | |
| ....4 | DRP29 | 2011-001396 | R-NETWORK;4.7Kohm,5%,1/16W,L,CHIP,8P,TP, | 1 | SA | |
| ....4 | | 2011-001427 | R-NETWORK;0ohm,5%,1/16W,L,CHIP,8P,TP,2.0 | 1 | SA | |
| ....4 | | 2011-001449 | R-NETWORK;22ohm,5%,1/16W,L,4P,TP,1010 | 4 | SA | |
| ....4 | | 2011-001527 | R-NETWORK;4.7Kohm,5%,1/16W,L,CHIP,4P,TP, | 3 | SNA | |
| ....4 | | 2011-001585 | R-NETWORK;47ohm,5%,1/16W,L,CHIP-V,4P,TP, | 2 | SNA | |
| ....4 | | 2011-001589 | R-NETWORK;0ohm,5%,1/16W,L,CHIP-V,4P,TP,1 | 12 | SNA | |
| ....4 | PC43 | 2203-000233 | C-CER,CHIP;0.1nF,5%,50V,C0G,TP,1005 | 5 | SA | |
| ....4 | RC34 | 2203-000280 | C-CER,CHIP;0.01nF,0.5pF,50V,C0G,1608 | 2 | SA | |
| ....4 | MC302 | 2203-000425 | C-CER,CHIP;.018nF,5%,50V,C0G,TP,1005 | 4 | SA | |
| ....4 | C254 | 2203-000438 | C-CER,CHIP;1nF,10%,50V,X7R,TP,1005 | 9 | SA | |
| ....4 | C507 | 2203-000489 | C-CER,CHIP;2.2nF,10%,50V,X7R,TP,1005 | 3 | SA | |
| ....4 | V1233 | 2203-000575 | C-CER,CHIP;220nF,10%,25V,X7R,TP,2012 | 6 | SNA | |
| ....4 | ZC14 | 2203-000626 | C-CER,CHIP;0.022nF,5%,50V,C0G,1608 | 2 | SNA | |
| ....4 | AD480 | 2203-000679 | C-CER,CHIP;0.027nF,5%,50V,C0G,1005 | 1 | SA | |
| ....4 | JC31 | 2203-000715 | C-CER,CHIP;3.3nF,10%,50V,X7R,1608 | 4 | SNA | |
| ....4 | DC25 | 2203-000812 | C-CER,CHIP;.033nF,5%,50V,C0G,1005 | 10 | SNA | |
| ....4 | CK40B | 2203-000838 | C-CER,CHIP;0.39NF,5%,50V,C0G,TP,1608 | 1 | SNA | |
| ....4 | KFC6 | 2203-000872 | C-CER,CHIP;0.0030nF,0.25pF,50V,C0G,1608 | 2 | SNA | |
| ....4 | AD480 | 2203-001428 | C-CER,CHIP;470nF,10%,50V,X7R,TP,2012 | 3 | SNA | |
| ....4 | AD480 | 2203-002285 | C-CER,CHIP;10nF,10%,50V,X7R,1005 | 15 | SNA | |

| Level | Location No. | Code No. | Description & Specification | Q'ty | SA/SNA | Remark |
|---|---|---|---|---|---|---|
| ....4 | AD480 | 2203-002525 | C-CER,CHIP;0.56nF,10%,50V,X7R,TP,1005 | 10 | SNA | |
| ....4 | AAC1 | 2203-005249 | C-CER,CHIP;100nF,10%,50V,X7R,TP,1608 | 14 | SNA | |
| ....4 | DC9 | 2203-005481 | C-CER,CHIP;47nF,10%,10V,X7R,TP,1005 | 1 | SA | |
| ....4 | AD480 | 2203-005511 | C-CER,CHIP;27nF,10%,10V,X7R,TP,1005 | 1 | SA | |
| ....4 | AD480 | 2203-005968 | C-CER,CHIP;4.7NF,10%,50V,X7R,TP,1005 | 3 | SNA | |
| ....4 | AD480 | 2203-006126 | C-CER,CHIP;47nF,10%,16V,X7R,1005 | 2 | SNA | |
| ....4 | PC11 | 2203-006141 | C-CER,CHIP;1000nF,10%,16V,X5R,1608 | 5 | SNA | |
| ....4 | C102 | 2203-006158 | C-CER,CHIP;100nF,10%,16V,X7R,1005 | 118 | SNA | |
| ....4 | JC10 | 2203-006324 | C-CER,CHIP;2200nF,10%,10V,X5R,1608 | 2 | SA | |
| ....4 | AD480 | 2203-006336 | C-CER,CHIP;10000nF,10%,25V,X5R,3216 | 7 | SA | |
| ....4 | C125 | 2203-006361 | C-CER,CHIP;10000nF,10%,10V,X5R,TP,2012 | 57 | SC | |
| ....4 | C234 | 2203-006378 | C-CER,CHIP;4700nF,10%,6.3V,X5R,TP,1608 | 1 | SNA | |
| ....4 | HE4 | 2203-006474 | C-CER,CHIP;22000nF,20%,6.3V,X5R,2012 | 1 | SA | |
| ....4 | HDC11 | 2203-006562 | C-CER,CHIP;1000nF,10%,10V,X5R,TP,1005 | 20 | SNA | |
| ....4 | AD480 | 2203-006824 | C-CER,CHIP;4700nF,10%,10V,X5R,1608 | 1 | SNA | |
| ....4 | AD480 | 2203-006841 | C-CER,CHIP;1000nF,10%,16V,X5R,1005 | 1 | SNA | |
| ....4 | AD480 | 2203-006992 | C-CER,CHIP;0.33nF,5%,50V,C0G,TP,1005 | 2 | SNA | |
| ....4 | T0052 | 2703-000158 | INDUCTOR-SMD;1uH,10%,2012 | 4 | SNA | |
| ....4 | T0052 | 2703-000296 | INDUCTOR-SMD;680nH,10%,1608 | 1 | SA | |
| ....4 | VL6 | 2703-000398 | INDUCTOR-SMD;10uH,10%,3225 | 6 | SA | |
| ....4 | L1103 | 2703-000403 | INDUCTOR-SMD;22uH,10%,3225 | 1 | SA | |
| ....4 | T0052 | 2703-001239 | INDUCTOR-SMD;3.3uH,10%,1608 | 3 | SA | |
| ....4 | T0052 | 2703-002268 | INDUCTOR-SMD;8.2nH,5%,1005 | 2 | SNA | |
| ....4 | T0052 | 2703-003149 | INDUCTOR-SMD;2.2uH,20%,5050 | 2 | SA | |
| ....4 | | 2704-000029 | INDUCTOR-SMD-ARRAY;5.6uH,2300mA,2,0.08oh | 2 | SNA | |
| ....4 | X202 | 2801-003326 | CRYSTAL-SMD;24MHz,30ppm,28-ABX,20pF,50oh | 1 | SA | |
| ....4 | X202 | 2801-004004 | CRYSTAL-SMD;20.25MHz,20ppm,28-AAN,13pF,2 | 1 | SA | |
| ....4 | X202 | 2801-004775 | CRYSTAL-SMD;12MHz,30ppm,16pF,30ohm,TP | 1 | SNA | |
| ....4 | F103 | 2901-001506 | FILTER-EMI SMD;5V,0.13A,0pF,2x1x0.5mm,TP | 2 | SA | |
| ....4 | T0568 | 3301-001082 | BEAD-SMD;60ohm,3225,TP,43ohm/40MHz,83ohm | 1 | SNA | |
| ....4 | T0568 | 3301-001236 | BEAD-SMD;60ohm,1608 | 7 | SNA | |
| ....4 | T0568 | 3301-002039 | BEAD-SMD;26ohm,1608,TP | 43 | SA | |
| ....4 | T0313 | 3404-001207 | SWITCH-TACT;12V,50mA,160gf,6.2X6.2,SPST | 1 | SA | |
| ....4 | | 3601-001374 | FUSE-SURFACE MOUNT;32V,5A,FAST-ACTING,Hi | 1 | SNA | |
| ....4 | | 3701-001591 | CONNECTOR-HDMI;19P,2ROW,FEMALE,SMD-S,AU | 2 | SNA | |
| ....4 | | 3701-001693 | CONNECTOR-HDMI;19P,2ROW,FEMALE,SMD-A | 1 | SA | |
| ....4 | AC510 | 3708-001150 | CONNECTOR-FPC/FFC/PIC;30P,1mm,SMD-A,SN,Y | 1 | SA | |
| ....4 | CON_US | 3711-005616 | HEADER-BOARD TO CABLE;BOX,10P,1R,2mm,SMD | 1 | SNA | |
| ....4 | HB01A | 3711-007336 | HEADER-BOARD TO CABLE;B0X,4P,1R,2.5mm,SM | 1 | SA | |
| ....4 | T0077 | BN41-01377A | PCB MAIN;Trident SX1,FR-4,4,1.0,1.2,192x | 1 | SNA | |
| ....4 | | BN97-04127A | ASSY MICOM-SUB2;T-TDT5DAAC-0340.0,L450,A | 1 | SNA | |
| .....5 | | 1107-001818 | IC-NAND FLASH;KFG1G16U2C-DIB6,1024Mbit,6 | 1 | SNA | |
| ....4 | | BN97-04140A | ASSY MICOM-SUB;T-TDT5DEUS-1002,2010.03.1 | 1 | SNA | |
| .....5 | IC115 | 1107-001580 | IC-FLASH MEMORY;MX25L4005,4Mbit,512Kx8,S | 1 | SNA | |
| ....4 | C | 2402-001314 | C-AL,SMD;100uF,20%,16V,WT,TP,6x5.8mm | 1 | SA | |
| 0.1 | | BN92-06107F | ASSY LABEL;NEW MODEL | 1 | SNA | |
| ..2 | | AA68-03752D | LABEL-STICKER;WW,ALL,Art Paper(90g),44.5 | 1 | SNA | |
| ..2 | T0527 | BP68-00052B | LABEL-00,RATING;CCTV,TETRON PAPER,T0.05, | 1 | SNA | |

# 1. Precautions

## 1-1. Safety Precautions

Follow these safety, servicing and ESD precautions to prevent damage and to protect against potential hazards such as electrical shock.

### 1-1-1. Warnings

1. For continued safety, do not attempt to modify the circuit board.
2. Disconnect the AC power and DC power jack before servicing.

### 1-1-2. Servicing the LCD TV

1. When servicing the LCD TV, Disconnect the AC line cord from the AC outlet.
2. It is essential that service technicians have an accurate voltage meter available at all times.
   Check the calibration of this meter periodically.

### 1-1-3. Fire and Shock Hazard

Before returning the LCD TV to the user, perform the following safety checks:

1. Inspect each lead dress to make certain that the leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the LCD TV.
2. Inspect all protective devices such as nonmetallic control knobs, insulating materials, cabinet backs, adjustment and compartment covers or shields, isolation resistorcapacitor networks, mechanical insulators, etc.
3. Leakage Current Hot Check (Figure 1-1):
   **WARNING** : Do not use an isolation transformer during this test.
   Use a leakage current tester or a metering system that complies with American National Standards Institute (ANSI C101.1, Leakage Current for Appliances), and Underwriters Laboratories (UL Publication UL1410, 59.7).

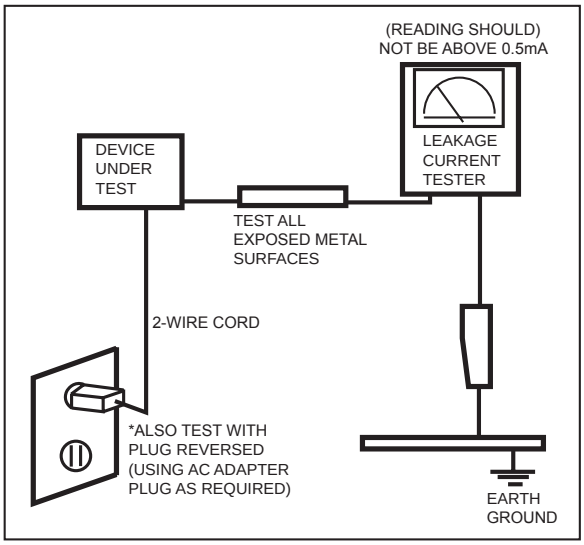



**Figure 1-1**. Leakage Current Test Circuit

4. With the unit completely reassembled, plug the AC line cord directly into a 120V AC outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known earth ground (metal water pipe, conduit, etc.) and all exposed metal parts, including: metal cabinets, screwheads and control shafts.
   The current measured should not exceed 0.5 milliamp.
   Reverse the power-plug prongs in the AC outlet and repeat the test.

### 1-1-4. Product Safety Notices

Some electrical and mechanical parts have special safetyrelated characteristics which are often not evident from visual inspection. The protection they give may not be obtained by replacing them with components rated for higher voltage, wattage, etc. Parts that have special safety characteristics are identified by ⚠ on schematics and parts lists. A substitute replacement that does not have the same safety characteristics as the recommended replacement part might create shock, fire and/or other hazards. Product safety is under review continuously and new instructions are issued whenever appropriate.

# 1-2. Servicing Precautions

**WARNING:** An electrolytic capacitor installed with the wrong polarity might explode.
**Caution:** Before servicing units covered by this service manual, read and follow the Safety Precautions section of this manual.
**Note:** If unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions, always follow the safety precautions.

## 1-2-1 General Servicing Precautions

1. Always unplug the unit's AC power cord from the AC power source and disconnect the DC Power Jack before attempting to:
   (a) remove or reinstall any component or assembly, (b) disconnect PCB plugs or connectors, (c) connect a test component in parallel with an electrolytic capacitor.
2. Some components are raised above the printed circuit board for safety. An insulation tube or tape is sometimes used. The internal wiring is sometimes clamped to prevent contact with thermally hot components. Reinstall all such elements to their original position.
3. After servicing, always check that the screws, components and wiring have been correctly reinstalled. Make sure that the area around the serviced part has not been damaged.
4. Check the insulation between the blades of the AC plug and accessible conductive parts (examples: metal panels, input terminals and earphone jacks).
5. Insulation Checking Procedure: Disconnect the power cord from the AC source and turn the power switch ON. Connect an insulation resistance meter (500 V) to theblades of the AC plug.
   The insulation resistance between each blade of the AC plug and accessible conductive parts (see above) should be greater than 1 megohm.
6. Always connect a test instrument's ground lead to the instrument chassis ground before connecting the positive lead; always remove the instrument's ground lead last.

# 1-3. Electrostatically Sensitive Devices (ESD) Precautions

Some semiconductor (solid state) devices can be easily damaged by static electricity. Such components are commonly called Electrostatically Sensitive Devices (ESD). Examples of typical ESD are integrated circuits and some field-effect transistors. The following techniques will reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging wrist-strap device. To avoid a shock hazard, be sure to remove the wrist strap before applying power to the LCD TV.
2. After removing an ESD-equipped assembly, place it on a conductive surface such as aluminum foil to prevent accumulation of an electrostatic charge.
3. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ESDs.
4. Use only a grounded-tip soldering iron to solder or desolder ESDs.
5. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static" can generate electrical charges sufficient to damage ESDs.
6. Do not remove a replacement ESD from its protective package until you are ready to install it. Most replacement ESDs are packaged with leads that are electrically shorted together by conductive foam, aluminum foil or other conductive materials.
7. Immediately before removing the protective material from the leads of a replacement ESD, touch the protective material to the chassis or circuit assembly into which the device will be installed.
   **Caution:** Be sure no power is applied to the chassis or circuit and observe all other safety precautions.
8. Minimize body motions when handling unpackaged replacement ESDs. Motions such as brushing clothes together, or lifting your foot from a carpeted floor can generate enough static electricity to damage an ESD.

## 1-4. Installation Precautions

1. For safety reasons, more than a people are required for carrying the product.
2. Keep the power cord away from any heat emitting devices, as a melted covering may cause fire or electric shock.
3. Do not place the product in areas with poor ventilation such as a bookshelf or closet. The increased internal temperature may cause fire.
4. Bend the external antenna cable when connecting it to the product. This is a measure to protect it from being exposed to moisture. Otherwise, it may cause a fire or electric shock.
5. Make sure to turn the power off and unplug the power cord from the outlet before repositioning the product. Also check the antenna cable or the external connectors if they are fully unplugged. Damage to the cord may cause fire or electric shock.
6. Keep the antenna far away from any high-voltage cables and install it firmly. Contact with the highvoltage cable or the antenna falling over may cause fire or electric shock.
7. When installing the product, leave enough space (0.4m) between the product and the wall for ventilation purposes. A rise in temperature within the product may cause fire.

# Memo

# 2. Product specifications

## 2-1. Feature & Specifications

| Model | LA22C450E1 |
|---|---|
| **Feature** | |
| ▶ RF, 1-HDMI, 1-Component/AV, 1-AV, 1-USB2.0, D-SUB, Optical, Audio Out, Headphone<br>▶ Brightness : 500 cd/m$^2$<br>▶ Response Time : 6.5ms | |

| **Specifications** | | |
|---|---|---|
| **Item** | **Description** | |
| LCD Panel | 22inch HD 50/60Hz | |
| Scanning Frequency | Horizontal : 60 kHz ~ 73 kHz (Automatic)<br>Vertical : 47 Hz ~ 63 Hz (Automatic) | |
| Display Colors | 16.7M color | |
| Maximum resolution | Horizontal : 1366 Pixels<br>Vertical : 768 pixels | |
| Input Signal | Analog 0.7 Vp-p ± 5% positive at 75Ω, internally terminated | |
| Input Sync Signal | H/V Separate, TTL, P. or N. | |
| Maximum Pixel Clock rate | 76MHz | |
| Active Display<br>Horizontal/Vertical | 18.96 x 10.73 inches (481.5(H) x 272.5(V) mm) | |
| AC power voltage & Frequency | AC 110V ~ 240V, 50/60Hz | |
| Power Consumption | Under 55W (Under 0.3W, Stand by) | |
| Dimensions<br>Set (W x D x H) | 21.0 x 6.8 x 15.8 inches (533.2 x 171.9 x 402.5 mm)_with stand<br>21.0 x 2.4 x 13.9 inches (533.2 x 60.8 x 354.1 mm)_without stand | |
| Weight | 11.46 lbs (5.20kg)_with stand<br>10.38 lbs (4.71kg)_without stand | |
| TV System | Tunning | Frequency Synthesize (Refer to detailed Frequency Table) |
| | System | PAL, SECAM, NT4.43,NT3.58 |
| | Sound | BG, DK, M, I |
| Environmental Considerations | Operating Temperature : 32˚F ~ 122˚F (0˚C ~ 50˚C)<br>Operating Humidity : 10% ~ 90%<br>Storage temperature : -4˚F ~ 140˚F (-20˚C ~ 60˚C)<br>Storage Humidity: 10% ~ 90% | |
| Audio Spec. | - MAX Internal Audio Output Power : Each 3W(Left/Right)<br>- Equalizer : 5band<br>- Output Frequency : RF : 20 Hz ~ 15.4 kHz<br>AV/Componet/HDMI : 20 Hz ~ 20 kHz | |
| **Note:** Dolby Digital$^+$, Game Mode, Film Mode, Energy Saving, Anynet$^+$ | | |

| Model | LA26C450E1 |
|---|---|
| **Feature** | |
| ▶ RF, 3-HDMI, 2-Component/AV, 1-USB2.0, D-SUB, Optical, Audio Out, FM Transmitter<br>▶ Brightness : 500 cd/$m^2$<br>▶ Response Time : 6.5ms | |

| **Specifications** | | |
|---|---|---|
| **Item** | **Description** | |
| LCD Panel | 26inch HD 50/60Hz | |
| Scanning Frequency | Horizontal : 60 kHz ~ 73 kHz (Automatic)<br>Vertical : 47 Hz ~ 63 Hz (Automatic) | |
| Display Colors | 16.7M color | |
| Maximum resolution | Horizontal : 1366 Pixels<br>Vertical : 768 pixels | |
| Input Signal | Analog 0.7 Vp-p ± 5% positive at 75Ω, internally terminated | |
| Input Sync Signal | H/V Separate, TTL, P. or N. | |
| Maximum Pixel Clock rate | 76MHz | |
| Active Display<br>Horizontal/Vertical | 22.67 x 12.74 inches (575.769 (H) x 323.712 (V) mm) | |
| AC power voltage & Frequency | AC 110V ~ 240V, 50/60Hz | |
| Power Consumption | Under 90W (Under 0.3W, Stand by) | |
| Dimensions<br>Set (W x D x H) | 25.5 x 8.8 x 18.7 nchs (646.5 x 222.2 x 475.8 mm)_with stand<br>25.5 x 3.0 x 17.0 inchs (646.5 x 77.0 x 432.3 mm)_without stand | |
| Weight | 14.66 lbs (6.65kg)_with stand<br>13.76 lbs (6.24kg)_without stand | |
| TV System | Tunning | Frequency Synthesize (Refer to detailed Frequency Table) |
| | System | PAL, SECAM, NT4.43,NT3.58 |
| | Sound | BG, DK, M, I |
| Environmental Considerations | Operating Temperature : 32˚F ~ 122˚F (0˚C ~ 50˚C)<br>Operating Humidity : 10% ~ 90%<br>Storage temperature : -4˚F ~ 140˚F (-20˚C ~ 60˚C)<br>Storage Humidity: 10% ~ 90% | |
| Audio Spec. | - MAX Internal Audio Output Power : Each 5W(Left/Right)<br>- Equalizer : 5band<br>- Output Frequency : RF : 20 Hz ~ 15.4 kHz<br>AV/Componet/HDMI : 20 Hz ~ 20 kHz | |
| **Note:** Dolby Digital+, Game Mode, Film Mode, Energy Saving, Anynet+ | | |

| Model | LA32C450E1 |
|---|---|
| **Feature** | |
| ▶ RF, 3-HDMI, 2-Component/AV, 1-USB2.0, D-SUB, Optical, Audio Out, FM Transmitter<br>▶ Brightness : 500cd//$m^2$<br>▶ Response Time : 6.5 ms | |

| **Specifications** | | |
|---|---|---|
| **Item** | **Description** | |
| LCD Panel | 32inch HD 50/60Hz | |
| Scanning Frequency | Horizontal : 60 kHz ~ 73 kHz (Automatic)<br>Vertical : 47 Hz ~ 63 Hz (Automatic) | |
| Display Colors | 16.7M color | |
| Maximum resolution | Horizontal : 1366 Pixels<br>Vertical : 768 pixels | |
| Input Signal | Analog 0.7 Vp-p ± 5% positive at 75Ω, internally terminated | |
| Input Sync Signal | H/V Separate, TTL, P. or N. | |
| Maximum Pixel Clock rate | 76MHz | |
| Active Display<br>Horizontal/Vertical | 27.50 x 15.47 inches (698.4 (H) x 392.85 (V) mm) | |
| AC power voltage & Frequency | AC 110V ~ 240V, 50/60Hz | |
| Power Consumption | Under 120W (Under 0.3W, Stand by) | |
| Dimensions<br>Set (W x D x H) | 30.9 x 9.7 x 22.8 inchs (784.4 x 247.2 x 580.0 mm)_with stand<br>30.9 x 3.0 x 20.2 inchs (784.4 x 76.1 x 514.2 mm)_without stand | |
| Weight | 20.30 lbs (9.21kg)_with stand<br>18.96 lbs (8.6kg)_without stand | |
| TV System | Tunning | Frequency Synthesize (Refer to detailed Frequency Table) |
| | System | PAL, SECAM, NT4.43,NT3.58 |
| | Sound | BG, DK, M, I |
| Environmental Considerations | Operating Temperature : 32˚F ~ 122˚F (0˚C ~ 50˚C)<br>Operating Humidity : 10% ~ 90%<br>Storage temperature : -4˚F ~ 140˚F (-20˚C ~ 60˚C)<br>Storage Humidity: 10% ~ 90% | |
| Audio Spec. | - MAX Internal Audio Output Power : Each 10W(Left/Right)<br>- Equalizer : 5band<br>- Output Frequency : RF : 20 Hz ~ 15.4 kHz<br>AV/Componet/HDMI : 20 Hz ~ 20 kHz | |
| **Note:** Dolby Digital+, Game Mode, Film Mode, Energy Saving, Anynet+ | | |

# 2-2. Specification Comparison to Old Models

※ O : application, X : non-application

| Model | LC4E(LA**C450E1) | LB4B(LA**B450B1) |
|---|---|---|
| Design | | |
| Display Type | LCD TV | LCD TV |
| Built-in Tuner | O | O |
| Resolution | 1366 x 768 | 1366 x 768 |
| LCD Panel | TFT LCD Panel 50/60Hz | TFT LCD Panel 50/60Hz |
| Screen Size | 22"/26"/32" | 26"/32"/37"/40" |
| Picture ratio | 16 : 9 | 16 : 9 |
| Dimensions (W x H x D) | 22" 21.0 x 6.8 x 15.8 inches_with stand<br>26" 25.5 x 8.8 x 17.0 inches _with stand<br>32" 26.0 x 9.7 x 22.8 inches _with stand | 26" 26.0 x 8.5 x 19.4 inches _with stand<br>32" 31.4 x 9.4 x 22.8 inches _with stand |
| Weight | 22" 5.2 kg_with stand<br>26" 6.8 kg_with stand<br>32" 9.6 kg_with stand | 26" 6.5kg_with stand<br>32" 11.4kg_with stand |
| Brightness | 500 nit | 500 nit |
| Picture Enhacer | DNIe (SX1 / X4) | DNIe (Lola3) |
| Equalizer | 5 Band | 5 Band |
| Auto Volume Control | O | O |
| Surround Sound | Dolby Digital Plus | SRS TruSurround HD & Dolby Digital |
| Speaker Output | 22" 3W / 26" 5W / 32" 10W | 10W + 10W |
| PIP | O | O |
| Caption | O | O |
| Entertainment Mode | X | X |
| Game Mode | O | O |
| Energy Saving | O | O |
| Anynet+ | O | O |
| Antenna | 1 | 1 |

# 2-3. Detail Factory Option

※ If you replace the main board with new one, please change the factory option as well.
The options you must change are "Type".

### • LC450 (SX1)

| Model Name | | | LA22C450E1 | LA26C450E1 | LA32C450E1 |
|---|---|---|---|---|---|
| Panel | | Vendor | SEC | AUO | SEC |
| | | CODE | BN07-00757A | BN07-00824A | BN07-00807A |
| | | SPEC | LTF216AT01 | T260XW04 V2 | LTF320AP08 |
| SMPS | | IP Board (SEC) | BN44-00370A | BN44-00338A | BN44-00338A |
| Byte | Item | CHASSIS ASS'Y | BN91-05028E | BN91-05028A | BN91-05028A |
| | | PBA ASSY CODE | BN94-03325E | BN94-03325A | BN94-03325A |
| 0 | Factory Reset | - | - | - | - |
| 1 | Type | | 22A6AH0C | 26L6AH0C | 32A6AH0C |
| 2 | Local Set | | Depending on country | Depending on country | Depending on country |
| 3 | Model | | LC450 | LC450 | LC450 |
| 4 | Tuner | | DRXKSEMCO | DRXKSEMCO | DRXKSEMCO |
| 5 | DDR | | 0 | 0 | 0 |
| 6 | Light Effect | | OFF | OFF | OFF |
| 7 | Ch Table | | Depending on country | Depending on country | Depending on country |
| 8 | Country | | … | … | … |
| 9 | Front Color | | S-R-BLK | S-R-BLK | S-R-BLK |

### • LC450 (X4)

| Model Name | | | LA22C450E1 | LA26C450E1 | LA32C450E1 |
|---|---|---|---|---|---|
| Panel | | Vendor | SEC | AUO | SEC |
| | | CODE | BN07-00757A | BN07-00824A | BN07-00807A |
| | | SPEC | LTF216AT01 | T260XW04 V2 | LTF320AP08 |
| SMPS | | IP Board (SEC) | BN44-00370A | BN44-00338A | BN44-00338A |
| Byte | Item | CHASSIS ASS'Y | | | |
| | | PBA ASSY CODE | | | |
| 0 | Factory Reset | - | - | - | - |
| 1 | Type | | 22A6AH0C | 26L6AH0C | 32A6AH0C |
| 2 | Local Set | | Depending on country | Depending on country | Depending on country |
| 3 | Model | | LC450 | LC450 | LC450 |
| 4 | Tuner | | HTM6BXg | HTM6BXg | HTM6BXg |
| 5 | DDR | | 0 | 0 | 0 |
| 6 | Light Effect | | OFF | OFF | OFF |
| 7 | Ch Table | | Depending on country | Depending on country | Depending on country |
| 8 | Country | | … | … | … |
| 9 | Front Color | | S-R-BLK | S-R-BLK | S-R-BLK |

## ■ CHANNEL FREQUENCY TABLE

1. OUTPUT FREQUENCY : ANALOG fv:45.75MHz, fs:41.25MHz DIGITAL Fc:44MHz
2. TUNING STEP SIZE : FIRST PLL 250KHz SECOND PLL 62.5KHz

(Unit : MHz)

| CH Number | AREA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | ASIA W/EUROPE | BAND | CIS E/EUROPE | BAND | HONG KONG U/K | BAND | NZ/ INDONESIA | BAND | SOUTH AFRICA | BAND |
| C00 | - | - | - | - | - | - | - | - | - | - |
| C01 | 46.25 | VHF | 49.75 | VHF | 49.75 | VHF | 44.25 | VHF | - | - |
| C02 | 48.25 | VHF | 59.25 | V-L | 59.25 | V-L | 55.25 | V-L | - | - |
| C03 | 55.25 | V-L | 77.25 | V-L | 77.25 | V-L | 62.25 | V-L | - | - |
| C04 | 62.25 | V-L | 85.25 | V-L | 85.25 | V-L | 175.25 | V-H | 175.25 | V-H |
| C05 | 175.25 | V-H | 93.25 | VHF | 93.25 | VHF | 182.25 | V-H | 183.25 | V-H |
| C06 | 182.25 | V-H | 175.25 | V-H | 175.25 | V-H | 189.25 | V-H | 191.25 | V-H |
| C07 | 189.25 | V-H | 183.25 | V-H | 183.25 | V-H | 196.25 | V-H | 199.25 | V-H |
| C08 | 196.25 | V-H | 191.25 | V-H | 191.25 | V-H | 203.25 | V-H | 207.25 | V-H |
| C09 | 203.25 | V-H | 199.25 | V-H | 199.25 | V-H | 210.25 | V-H | 215.25 | V-H |
| C10 | 210.25 | V-H | 207.25 | V-H | 207.25 | V-H | 217.25 | VHF | 223.25 | VHF |
| C11 | 217.25 | VHF | 215.25 | V-H | 215.25 | V-H | 224.25 | VHF | 231.25 | VHF |
| C12 | 224.25 | VHF | 223.25 | VHF | 223.25 | VHF | 45.25 | VHF | 239.25 | VHF |
| C13 | 53.75 | VHF | 53.75 | VHF | 45.75 | VHF | - | - | 247.25 | VHF |
| C14 | - | - | 62.25 | V-L | 53.75 | VHF | - | - | - | - |
| C15 | 82.25 | V-L | 82.25 | V-L | 61.75 | V-L | - | - | - | - |
| C16 | - | - | - | - | - | - | 69.75 | V-L | - | - |
| C17 | 183.75 | V-H | 183.75 | V-H | 95.75 | VHF | - | - | - | - |
| C18 | 192.25 | V-H | 192.25 | V-H | - | - | - | - | - | - |
| C19 | 201.25 | V-H | - | - | 201.25 | V-H | - | - | - | - |
| C20 | - | - | 210.25 | V-H | - | - | - | - | - | - |
| C21 | 471.25 | UHF | 471.25 | UHF | 471.25 | UHF | 471.25 | UHF | 471.25 | UHF |
| C22 | 479.25 | UHF | 479.25 | UHF | 479.25 | UHF | 479.25 | UHF | 479.25 | UHF |
| C23 | 487.25 | UHF | 487.25 | UHF | 487.25 | UHF | 487.25 | UHF | 487.25 | UHF |
| C24 | 495.25 | UHF | 495.25 | UHF | 495.25 | UHF | 495.25 | UHF | 495.25 | UHF |
| C25 | 503.25 | UHF | 503.25 | UHF | 503.25 | UHF | 503.25 | UHF | 503.25 | UHF |
| C26 | 511.25 | UHF | 511.25 | UHF | 511.25 | UHF | 511.25 | UHF | 511.25 | UHF |
| C27 | 519.25 | UHF | 519.25 | UHF | 519.25 | UHF | 519.25 | UHF | 519.25 | UHF |
| C28 | 527.25 | UHF | 527.25 | UHF | 527.25 | UHF | 527.25 | UHF | 527.25 | UHF |
| C29 | 535.25 | UHF | 535.25 | UHF | 535.25 | UHF | 535.25 | UHF | 535.25 | UHF |
| C30 | 543.25 | UHF | 543.25 | UHF | 543.25 | UHF | 543.25 | UHF | 543.25 | UHF |
| C31 | 551.25 | UHF | 551.25 | UHF | 551.25 | UHF | 551.25 | UHF | 551.25 | UHF |
| C32 | 559.25 | UHF | 559.25 | UHF | 559.25 | UHF | 559.25 | UHF | 559.25 | UHF |
| C33 | 567.25 | UHF | 567.25 | UHF | 567.25 | UHF | 567.25 | UHF | 567.25 | UHF |
| C34 | 575.25 | UHF | 575.25 | UHF | 575.25 | UHF | 575.25 | UHF | 575.25 | UHF |
| C35 | 583.25 | UHF | 583.25 | UHF | 583.25 | UHF | 583.25 | UHF | 583.25 | UHF |
| C36 | 591.25 | UHF | 591.25 | UHF | 591.25 | UHF | 591.25 | UHF | 591.25 | UHF |
| C37 | 599.25 | UHF | 599.25 | UHF | 599.25 | UHF | 599.25 | UHF | 599.25 | UHF |
| C38 | 607.25 | UHF | 607.25 | UHF | 607.25 | UHF | 607.25 | UHF | 607.25 | UHF |
| C39 | 615.25 | UHF | 615.25 | UHF | 615.25 | UHF | 615.25 | UHF | 615.25 | UHF |
| C40 | 623.25 | UHF | 623.25 | UHF | 623.25 | UHF | 623.25 | UHF | 623.25 | UHF |
| C41 | 631.25 | UHF | 631.25 | UHF | 631.25 | UHF | 631.25 | UHF | 631.25 | UHF |
| C42 | 639.25 | UHF | 639.25 | UHF | 639.25 | UHF | 639.25 | UHF | 639.25 | UHF |
| C43 | 647.25 | UHF | 647.25 | UHF | 647.25 | UHF | 647.25 | UHF | 647.25 | UHF |
| C44 | 655.25 | UHF | 655.25 | UHF | 655.25 | UHF | 655.25 | UHF | 655.25 | UHF |
| C45 | 663.25 | UHF | 663.25 | UHF | 663.25 | UHF | 663.25 | UHF | 663.25 | UHF |
| C46 | 671.25 | UHF | 671.25 | UHF | 671.25 | UHF | 671.25 | UHF | 671.25 | UHF |
| C47 | 679.25 | UHF | 679.25 | UHF | 679.25 | UHF | 679.25 | UHF | 679.25 | UHF |
| C48 | 687.25 | UHF | 687.25 | UHF | 687.25 | UHF | 687.25 | UHF | 687.25 | UHF |
| C49 | 695.25 | UHF | 695.25 | UHF | 695.25 | UHF | 695.25 | UHF | 695.25 | UHF |
| C50 | 703.25 | UHF | 703.25 | UHF | 703.25 | UHF | 703.25 | UHF | 703.25 | UHF |
| C51 | 711.25 | UHF | 711.25 | UHF | 711.25 | UHF | 711.25 | UHF | 711.25 | UHF |
| C52 | 719.25 | UHF | 719.25 | UHF | 719.25 | UHF | 719.25 | UHF | 719.25 | UHF |
| C53 | 727.25 | UHF | 727.25 | UHF | 727.25 | UHF | 727.25 | UHF | 727.25 | UHF |
| C54 | 735.25 | UHF | 735.25 | UHF | 735.25 | UHF | 735.25 | UHF | 735.25 | UHF |
| C55 | 743.25 | UHF | 743.25 | UHF | 743.25 | UHF | 743.25 | UHF | 743.25 | UHF |
| C56 | 751.25 | UHF | 751.25 | UHF | 751.25 | UHF | 751.25 | UHF | 751.25 | UHF |
| C57 | 759.25 | UHF | 759.25 | UHF | 759.25 | UHF | 759.25 | UHF | 759.25 | UHF |
| C58 | 767.25 | UHF | 767.25 | UHF | 767.25 | UHF | 767.25 | UHF | 767.25 | UHF |
| C59 | 775.25 | UHF | 775.25 | UHF | 775.25 | UHF | 775.25 | UHF | 775.25 | UHF |
| C60 | 783.25 | UHF | 783.25 | UHF | 783.25 | UHF | 783.25 | UHF | 783.25 | UHF |

(Unit : MHz)

| CH Number | AREA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | ASIA W/EUROPE | BAND | CIS E/EUROPE | BAND | HONG KONG U/K | BAND | NZ/ INDONESIA | BAND | SOUTH AFRICA | BAND |
| C61 | 791.25 | UHF | 791.25 | UHF | 791.25 | UHF | 791.25 | UHF | 791.25 | UHF |
| C62 | 799.25 | UHF | 799.25 | UHF | 799.25 | UHF | 799.25 | UHF | 799.25 | UHF |
| C63 | 807.25 | UHF | 807.25 | UHF | 807.25 | UHF | 807.25 | UHF | 807.25 | UHF |
| C64 | 815.25 | UHF | 815.25 | UHF | 815.25 | UHF | 815.25 | UHF | 815.25 | UHF |
| C65 | 823.25 | UHF | 823.25 | UHF | 823.25 | UHF | 823.25 | UHF | 823.25 | UHF |
| C66 | 831.25 | UHF | 831.25 | UHF | 831.25 | UHF | 831.25 | UHF | 831.25 | UHF |
| C67 | 839.25 | UHF | 839.25 | UHF | 839.25 | UHF | 839.25 | UHF | 839.25 | UHF |
| C68 | 847.25 | UHF | 847.25 | UHF | 847.25 | UHF | 847.25 | UHF | 847.25 | UHF |
| C69 | 855.25 | UHF | 855.25 | UHF | 855.25 | UHF | 855.25 | UHF | 855.25 | UHF |
| C70 | - | - | - | - | - | - | 53.75 | - | 53.75 | - |
| C71 | - | - | - | - | 62.25 | VHF | - | - | 62.25 | VHF |
| C72 | - | - | - | - | 82.25 | V-L | 82.25 | V-L | 82.25 | V-L |
| C73 | - | - | - | - | - | - | - | - | - | - |
| C74 | 69.75 | V-L | - | - | - | - | 183.25 | V-H | - | - |
| C75 | 76.25 | V-L | - | - | 192.25 | V-H | 192.25 | V-H | 192.25 | V-H |
| C76 | 83.25 | V-L | - | - | 201.25 | V-H | 201.25 | V-H | 201.25 | V-H |
| C77 | 90.25 | VHF | - | - | 210.25 | V-H | - | - | 210.25 | V-H |
| C78 | 97.25 | VHF | 217.25 | VHF | 217.25 | VHF | - | - | 217.25 | VHF |
| C79 | 59.25 | V-L | 224.25 | VHF | 224.25 | VHF | - | - | 224.25 | VHF |
| C80 | - | - | 93.25 | VHF | - | - | - | - | - | - |
| C81 | 49.75 | VHF | - | - | - | - | 49.75 | VHF | 49.75 | VHF |
| C82 | - | - | - | - | - | - | 59.25 | V-L | 59.25 | V-L |
| C83 | 77.25 | V-L | - | - | 77.25 | V-L | 77.25 | V-L | 77.25 | V-L |
| C84 | 85.25 | V-L | - | - | 85.25 | V-L | 85.25 | V-L | 85.25 | V-L |
| C85 | - | - | - | - | 93.25 | VHF | 93.25 | VHF | 93.25 | VHF |
| C86 | - | - | - | - | - | - | - | - | - | - |
| C86 | 183.25 | V-H | - | - | - | - | - | - | - | - |
| C86 | 191.25 | V-H | - | - | - | - | 191.25 | V-H | - | - |
| C86 | 199.25 | V-H | - | - | 199.25 | V-H | 199.25 | V-H | - | - |
| C86 | 207.25 | V-H | - | - | 207.25 | V-H | 207.25 | V-H | - | - |
| C86 | 215.25 | VHF | - | - | - | - | 215.25 | VHF | 215.25 | VHF |
| C86 | 223.25 | VHF | - | - | - | - | 223.25 | VHF | 223.25 | VHF |

(Unit : MHz)

| CH Number | AREA | | | | | |
|---|---|---|---|---|---|---|
| | AUSTRALIA | BAND | CHINA | BAND | AMERICA | BAND |
| C00 | 46.25 | VHF | - | - | - | - |
| C01 | 57.25 | V-L | 49.75 | VHF | - | - |
| C02 | 64.25 | V-L | 57.75 | V-L | 55.25 | V-L |
| C03 | 86.25 | V-L | 65.75 | V-L | 61.25 | V-L |
| C04 | 95.25 | VHF | 77.25 | V-L | 67.25 | V-L |
| C05 | 102.25 | VHF | 85.25 | V-L | 77.25 | V-L |
| C06 | 175.25 | V-H | 168.25 | VHF | 83.25 | V-L |
| C07 | 182.25 | V-H | 176.25 | V-H | 175.25 | V-H |
| C08 | 189.25 | V-H | 184.25 | V-H | 181.25 | V-H |
| C09 | 196.25 | V-H | 192.25 | V-H | 187.25 | V-H |
| C10 | 209.25 | V-H | 200.25 | V-H | 193.25 | V-H |
| C11 | 216.25 | VHF | 208.25 | VHF | 199.25 | VHF |
| C12 | 224.25 | VHF | 216.25 | VHF | 205.25 | VHF |
| C13 | 138.25 | V-H | 471.25 | UHF | 211.25 | VHF |
| C14 | 203.25 | V-H | 479.25 | UHF | 471.25 | UHF |
| C15 | - | - | 487.25 | UHF | 477.25 | UHF |
| C16 | - | - | 495.25 | UHF | 483.25 | UHF |
| C17 | - | - | 503.25 | UHF | 489.25 | UHF |
| C18 | - | - | 511.25 | UHF | 495.25 | UHF |
| C19 | - | - | 519.25 | UHF | 501.25 | UHF |
| C20 | - | - | 527.25 | UHF | 507.25 | UHF |
| C21 | x | - | 535.25 | UHF | 513.25 | UHF |
| C22 | x | - | 543.25 | UHF | 519.25 | UHF |
| C23 | x | - | 551.25 | UHF | 525.25 | UHF |
| C24 | x | - | 559.25 | UHF | 531.25 | UHF |
| C25 | x | - | 607.25 | UHF | 537.25 | UHF |
| C26 | x | - | 615.25 | UHF | 543.25 | UHF |
| C27 | x | - | 623.25 | UHF | 549.25 | UHF |
| C28 | 527.25 | UHF | 631.25 | UHF | 555.25 | UHF |
| C29 | 534.25 | UHF | 639.25 | UHF | 561.25 | UHF |
| C30 | 541.25 | UHF | 647.25 | UHF | 567.25 | UHF |
| C31 | 548.25 | UHF | 655.25 | UHF | 573.25 | UHF |
| C32 | 555.25 | UHF | 663.25 | UHF | 579.25 | UHF |
| C33 | 562.25 | UHF | 671.25 | UHF | 585.25 | UHF |
| C34 | 569.25 | UHF | 679.25 | UHF | 591.25 | UHF |
| C35 | 576.25 | UHF | 687.25 | UHF | 597.25 | UHF |
| C36 | 583.25 | UHF | 695.25 | UHF | 603.25 | UHF |
| C37 | 590.25 | UHF | 703.25 | UHF | 609.25 | UHF |
| C38 | 597.25 | UHF | 711.25 | UHF | 615.25 | UHF |
| C39 | 604.25 | UHF | 719.25 | UHF | 621.25 | UHF |
| C40 | 611.25 | UHF | 727.25 | UHF | 627.25 | UHF |
| C41 | 618.25 | UHF | 735.25 | UHF | 633.25 | UHF |
| C42 | 625.25 | UHF | 743.25 | UHF | 639.25 | UHF |
| C43 | 632.25 | UHF | 751.25 | UHF | 645.25 | UHF |
| C44 | 639.25 | UHF | 759.25 | UHF | 651.25 | UHF |
| C45 | 646.25 | UHF | 767.25 | UHF | 657.25 | UHF |
| C46 | 653.25 | UHF | 775.25 | UHF | 663.25 | UHF |
| C47 | 660.25 | UHF | 783.25 | UHF | 669.25 | UHF |
| C48 | 667.25 | UHF | 791.25 | UHF | 675.25 | UHF |
| C49 | 674.25 | UHF | 799.25 | UHF | 681.25 | UHF |
| C50 | 681.25 | UHF | 807.25 | UHF | 687.25 | UHF |
| C51 | 688.25 | UHF | 815.25 | UHF | 693.25 | UHF |

(Unit : MHz)

| CH Number | AREA | | | | | |
|---|---|---|---|---|---|---|
| | AUSTRALIA | BAND | CHINA | BAND | AMERICA | BAND |
| C52 | 695.25 | UHF | 823.25 | UHF | 699.25 | UHF |
| C53 | 702.25 | UHF | 831.25 | UHF | 705.25 | UHF |
| C54 | 709.25 | UHF | 839.25 | UHF | 711.25 | UHF |
| C55 | 716.25 | UHF | 847.25 | UHF | 717.25 | UHF |
| C56 | 723.25 | UHF | 855.25 | UHF | 723.25 | UHF |
| C57 | 730.25 | UHF | 863.25 | UHF | 729.25 | UHF |
| C58 | 737.25 | UHF | - | - | 735.25 | UHF |
| C59 | 744.25 | UHF | - | - | 741.25 | UHF |
| C60 | 751.25 | UHF | - | - | 747.25 | UHF |
| C61 | 758.25 | UHF | - | - | 753.25 | UHF |
| C62 | 765.25 | UHF | - | - | 759.25 | UHF |
| C63 | 772.25 | UHF | - | - | 765.25 | UHF |
| C64 | 779.25 | UHF | - | - | 771.25 | UHF |
| C65 | 786.25 | UHF | 567.25 | UHF | 777.25 | UHF |
| C66 | 793.25 | UHF | 575.25 | UHF | 783.25 | UHF |
| C67 | 800.25 | UHF | 583.25 | UHF | 789.25 | UHF |
| C68 | 807.25 | UHF | 591.25 | UHF | 795.25 | UHF |
| C69 | 814.25 | UHF | 599.25 | UHF | 801.25 | UHF |
| C70 | 53.75 | - | - | - | 807.25 | UHF |
| C71 | 62.25 | VHF | - | - | 813.25 | UHF |
| C72 | 82.25 | V-L | - | - | 819.25 | UHF |
| C73 | - | - | - | - | 825.25 | UHF |
| C74 | 183.25 | - | - | - | 831.25 | UHF |
| C75 | 192.25 | V-H | - | - | 837.25 | UHF |
| C76 | 201.25 | V-H | - | - | 843.25 | UHF |
| C77 | - | V-H | - | - | 849.25 | UHF |
| C78 | - | VHF | - | - | 855.25 | UHF |
| C79 | - | VHF | - | - | 861.25 | UHF |
| C80 | - | - | - | - | 867.25 | UHF |
| C81 | 49.75 | VHF | - | - | 873.25 | UHF |
| C82 | 59.25 | V-L | - | - | 879.25 | UHF |
| C83 | 77.25 | V-L | - | - | 885.25 | UHF |
| C84 | 85.25 | V-L | - | - | - | - |
| C85 | 93.25 | VHF | - | - | - | - |
| C86 | - | - | - | - | - | - |
| C86 | - | - | - | - | - | - |
| C86 | 191.25 | - | - | - | - | - |
| C86 | 199.25 | - | - | - | - | - |
| C86 | 207.25 | - | - | - | - | - |
| C86 | 215.25 | VHF | - | - | - | - |
| C86 | 223.25 | VHF | - | - | - | - |

**Cable CHANNEL**

(Unit : MHz)

| CH Number | AREA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | ASIA W/EUROPE | BAND | CIS E/EUROPE | BAND | HONG KONG U/K | BAND | NZ/ INDONESIA | BAND | SOUTH AFRICA | BAND |
| S01 | 105.25 | VHF | 103.25 | VHF | 103.25 | VHF | 105.25 | VHF | 105.25 | VHF |
| S02 | 112.25 | VHF | 111.25 | VHF | 111.25 | VHF | 112.25 | VHF | 112.25 | VHF |
| S03 | 119.25 | VHF | 119.25 | VHF | 119.25 | VHF | 119.25 | VHF | 119.25 | VHF |
| S04 | 126.25 | VHF | 127.25 | VHF | 127.25 | VHF | 126.25 | VHF | 126.25 | VHF |
| S05 | 133.25 | VHF | 135.25 | VHF | 135.25 | VHF | 133.25 | VHF | 133.25 | VHF |
| S06 | 140.25 | VHF | 143.25 | VHF | 143.25 | VHF | 140.25 | VHF | 140.25 | VHF |
| S07 | 147.25 | VHF | 151.25 | VHF | 151.25 | VHF | 147.25 | VHF | 147.25 | VHF |
| S08 | 154.25 | VHF | 159.25 | VHF | 159.25 | VHF | 154.25 | VHF | 154.25 | VHF |
| S09 | 161.25 | VHF | 167.25 | VHF | 167.25 | VHF | 161.25 | VHF | 161.25 | VHF |
| S10 | 168.25 | VHF | 231.25 | VHF | 231.25 | VHF | 168.25 | VHF | 168.25 | VHF |
| S11 | 231.25 | VHF | 239.25 | VHF | 239.25 | VHF | 231.25 | VHF | 231.25 | VHF |
| S12 | 238.25 | VHF | 247.25 | VHF | 247.25 | VHF | 238.25 | VHF | 238.25 | VHF |
| S13 | 245.25 | VHF | 253.25 | VHF | 253.25 | VHF | 245.25 | VHF | 245.25 | VHF |
| S14 | 252.25 | VHF | 263.25 | VHF | 263.25 | VHF | 252.25 | VHF | 252.25 | VHF |
| S15 | 259.25 | VHF | 271.25 | VHF | 271.25 | VHF | 259.25 | VHF | 259.25 | VHF |
| S16 | 266.25 | VHF | 279.25 | VHF | 279.25 | VHF | 266.25 | VHF | 266.25 | VHF |
| S17 | 273.25 | VHF | 287.25 | VHF | 287.25 | VHF | 273.25 | VHF | 273.25 | VHF |
| S18 | 280.25 | VHF | 295.25 | VHF | 295.25 | VHF | 280.25 | VHF | 280.25 | VHF |
| S19 | 287.25 | VHF | 303.25 | UHF | 303.25 | UHF | 287.25 | VHF | 287.25 | VHF |
| S20 | 294.25 | VHF | - | - | - | - | 294.25 | VHF | 294.25 | VHF |
| S21 | 303.25 | UHF | - | - | - | - | 303.25 | UHF | 303.25 | UHF |
| S22 | 311.25 | UHF | 311.25 | UHF | 311.25 | UHF | 311.25 | UHF | 311.25 | UHF |
| S23 | 319.25 | UHF | 319.25 | UHF | 319.25 | UHF | 319.25 | UHF | 319.25 | UHF |
| S24 | 327.25 | UHF | 327.25 | UHF | 327.25 | UHF | 327.25 | UHF | 327.25 | UHF |
| S25 | 335.25 | UHF | 335.25 | UHF | 335.25 | UHF | 335.25 | UHF | 335.25 | UHF |
| S26 | 343.25 | UHF | 343.25 | UHF | 343.25 | UHF | 343.25 | UHF | 343.25 | UHF |
| S27 | 351.25 | UHF | 351.25 | UHF | 351.25 | UHF | 351.25 | UHF | 351.25 | UHF |
| S28 | 359.25 | UHF | 359.25 | UHF | 359.25 | UHF | 359.25 | UHF | 359.25 | UHF |
| S29 | 367.25 | UHF | 367.25 | UHF | 367.25 | UHF | 367.25 | UHF | 367.25 | UHF |
| S30 | 375.25 | UHF | 375.25 | UHF | 375.25 | UHF | 375.25 | UHF | 375.25 | UHF |
| S31 | 383.25 | UHF | 383.25 | UHF | 383.25 | UHF | 383.25 | UHF | 383.25 | UHF |
| S32 | 391.25 | UHF | 391.25 | UHF | 391.25 | UHF | 391.25 | UHF | 391.25 | UHF |
| S33 | 399.25 | UHF | 399.25 | UHF | 399.25 | UHF | 399.25 | UHF | 399.25 | UHF |
| S34 | 407.25 | UHF | 407.25 | UHF | 407.25 | UHF | 407.25 | UHF | 407.25 | UHF |
| S35 | 415.25 | UHF | 415.25 | UHF | 415.25 | UHF | 415.25 | UHF | 415.25 | UHF |
| S36 | 423.25 | UHF | 423.25 | UHF | 423.25 | UHF | 423.25 | UHF | 423.25 | UHF |
| S37 | 431.25 | UHF | 431.25 | UHF | 431.25 | UHF | 431.25 | UHF | 431.25 | UHF |
| S38 | 439.25 | UHF | 439.25 | UHF | 439.25 | UHF | 439.25 | UHF | 439.25 | UHF |
| S39 | 447.25 | UHF | 447.25 | UHF | 447.25 | UHF | 447.25 | UHF | 447.25 | UHF |
| S40 | 455.25 | UHF | 455.25 | UHF | 455.25 | UHF | 455.25 | UHF | 455.25 | UHF |
| S41 | 463.25 | UHF | 463.25 | UHF | 463.25 | UHF | 463.25 | UHF | 463.25 | UHF |

(Unit : MHz)

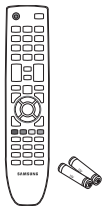
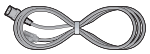
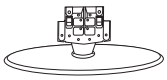
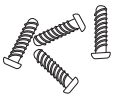
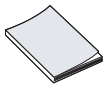
| CH Number | AREA | | | | | |
|---|---|---|---|---|---|---|
| | AUSTRALIA | BAND | CHINA | BAND | AMERICA | BAND |
| S01 | 105.25 | VHF | 112.25 | VHF | 73.25 | VHF |
| S02 | 112.25 | VHF | 120.25 | VHF | 55.25 | VHF |
| S03 | 119.25 | VHF | 128.25 | VHF | 61.25 | VHF |
| S04 | 126.25 | VHF | 136.25 | VHF | 67.25 | VHF |
| S05 | 133.25 | VHF | 144.25 | VHF | 77.25 | VHF |
| S06 | 140.25 | VHF | 152.25 | VHF | 83.25 | VHF |
| S07 | 147.25 | VHF | 160.25 | VHF | 175.25 | VHF |
| S08 | 154.25 | VHF | 224.25 | VHF | 181.25 | VHF |
| S09 | 161.25 | VHF | 232.25 | VHF | 187.25 | VHF |
| S10 | 168.25 | VHF | 240.25 | VHF | 193.25 | VHF |
| S11 | 231.25 | VHF | 248.25 | VHF | 199.25 | VHF |
| S12 | 238.25 | VHF | 256.25 | VHF | 205.25 | VHF |
| S13 | 245.25 | VHF | 264.25 | VHF | 211.25 | VHF |
| S14 | 252.25 | VHF | 272.25 | VHF | 121.25 | VHF |
| S15 | 259.25 | VHF | 280.25 | VHF | 127.25 | VHF |
| S16 | 266.25 | VHF | 288.25 | VHF | 133.25 | VHF |
| S17 | 273.25 | VHF | 296.25 | VHF | 139.25 | VHF |
| S18 | 280.25 | VHF | 304.25 | UHF | 145.25 | VHF |
| S19 | 287.25 | VHF | 312.25 | UHF | 151.25 | VHF |
| S20 | 294.25 | VHF | 320.25 | UHF | 157.25 | VHF |
| S21 | 303.25 | UHF | 328.25 | UHF | 163.25 | VHF |
| S22 | 311.25 | UHF | 336.25 | UHF | 169.25 | VHF |
| S23 | 319.25 | UHF | 344.25 | UHF | 217.25 | VHF |
| S24 | 327.25 | UHF | 352.25 | UHF | 223.25 | VHF |
| S25 | 335.25 | UHF | 360.25 | UHF | 229.25 | VHF |
| S26 | 343.25 | UHF | 368.25 | UHF | 235.25 | VHF |
| S27 | 351.25 | UHF | 376.25 | UHF | 241.25 | VHF |
| S28 | 359.25 | UHF | 384.25 | UHF | 247.25 | VHF |
| S29 | 367.25 | UHF | 392.25 | UHF | 253.25 | VHF |
| S30 | 375.25 | UHF | 400.25 | UHF | 259.25 | VHF |
| S31 | 383.25 | UHF | 408.25 | UHF | 265.25 | VHF |
| S32 | 391.25 | UHF | 416.25 | UHF | 271.25 | VHF |
| S33 | 399.25 | UHF | 424.25 | UHF | 277.25 | VHF |
| S34 | 407.25 | UHF | 432.25 | UHF | 283.25 | VHF |
| S35 | 415.25 | UHF | 440.25 | UHF | 289.25 | VHF |
| S36 | 423.25 | UHF | 448.25 | UHF | 295.25 | VHF |
| S37 | 431.25 | UHF | 456.25 | UHF | 301.25 | UHF |
| S38 | 439.25 | UHF | x | x | 307.25 | UHF |
| S39 | 447.25 | UHF | x | x | 313.25 | UHF |
| S40 | 455.25 | UHF | x | x | 319.25 | UHF |
| S41 | 463.25 | UHF | x | x | 325.25 | UHF |
| S42 | | | | | 331.25 | UHF |
| S43 | | | | | 337.25 | UHF |
| S44 | | | | | 343.25 | UHF |
| S45 | | | | | 349.25 | UHF |
| S46 | | | | | 355.25 | UHF |
| S47 | | | | | 361.25 | UHF |
| S48 | | | | | 367.25 | UHF |
| S49 | | | | | 373.25 | UHF |
| S50 | | | | | 379.25 | UHF |
| S51 | | | | | 385.25 | UHF |
| S52 | | | | | 391.25 | UHF |
| S53 | | | | | 397.25 | UHF |
| S54 | | | | | 403.25 | UHF |
| S55 | | | | | 409.25 | UHF |
| S56 | | | | | 415.25 | UHF |
| S57 | | | | | 421.25 | UHF |
| S58 | | | | | 427.25 | UHF |
| S59 | | | | | 433.25 | UHF |
| S60 | | | | | 439.25 | UHF |
| S61 | | | | | 445.25 | UHF |
| S62 | | | | | 451.25 | UHF |
| S63 | | | | | 457.25 | UHF |
| S64 | | | | | 463.25 | UHF |
| S65 | | | | | 469.25 | UHF |

(Unit : MHz)

| CH Number | AREA | | | | | |
|---|---|---|---|---|---|---|
| | AUSTRALIA | BAND | CHINA | BAND | AMERICA | BAND |
| S66 | | | | | 475.25 | UHF |
| S67 | | | | | 481.25 | UHF |
| S68 | | | | | 487.25 | UHF |
| S69 | | | | | 493.25 | UHF |
| S70 | | | | | 499.25 | UHF |
| S71 | | | | | 505.25 | UHF |
| S72 | | | | | 511.25 | UHF |
| S73 | | | | | 517.25 | UHF |
| S74 | | | | | 523.25 | UHF |
| S75 | | | | | 529.25 | UHF |
| S76 | | | | | 535.25 | UHF |
| S77 | | | | | 541.25 | UHF |
| S78 | | | | | 547.25 | UHF |
| S79 | | | | | 553.25 | UHF |
| S80 | | | | | 559.25 | UHF |
| S81 | | | | | 565.25 | UHF |
| S82 | | | | | 571.25 | UHF |
| S83 | | | | | 577.25 | UHF |
| S84 | | | | | 583.25 | UHF |
| S85 | | | | | 589.25 | UHF |
| S86 | | | | | 595.25 | UHF |
| S87 | | | | | 601.25 | UHF |
| S88 | | | | | 607.25 | UHF |
| S99 | | | | | 613.25 | UHF |
| S90 | | | | | 619.25 | UHF |
| S91 | | | | | 625.25 | UHF |
| S92 | | | | | 631.25 | UHF |
| S93 | | | | | 637.25 | UHF |
| S94 | | | | | 643.25 | UHF |
| S95 | | | | | 91.25 | VHF |
| S96 | | | | | 97.25 | VHF |
| S97 | | | | | 103.25 | VHF |
| S98 | | | | | 109.25 | VHF |
| S99 | | | | | 115.25 | VHF |

CATV CH mark (A row) : China area : attach ‘Z’
besides area : attach ‘S’
For example) China : Z10
besides area : S10

## 2-4. Accessories

| Product | Description | Code. No | Remark |
|---|---|---|---|
|  | Remote Control & Batteries (AAA x 2) | BN59-01010A | Samsung Electronics Service center |
|  | Power Cord | Depending On Country | |
|  | Stand | 22" BN96-12739A<br>26" BN96-12869A<br>32" BN96-12870A | |
|  | Screw (for the stand - M4, L6) | 6002-001294 | |
|  | Owner’s Instructions | BN68-02684A | |
| | Warranty Card / Registration Card / Safety Guide Manual (Not available in all locations) | | |
| | FM Transmitter | BN59-00994A | |

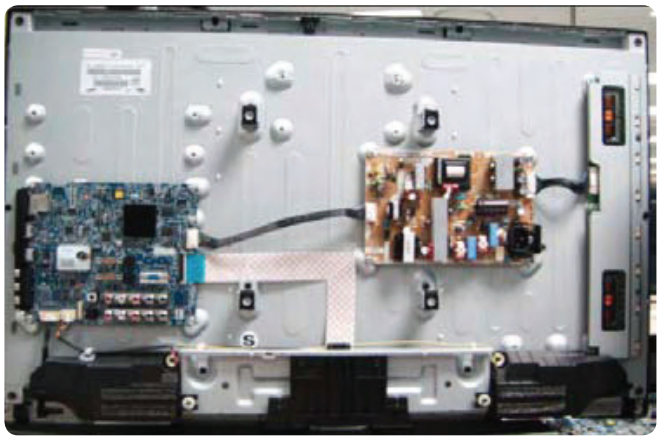
# 4. Troubleshooting

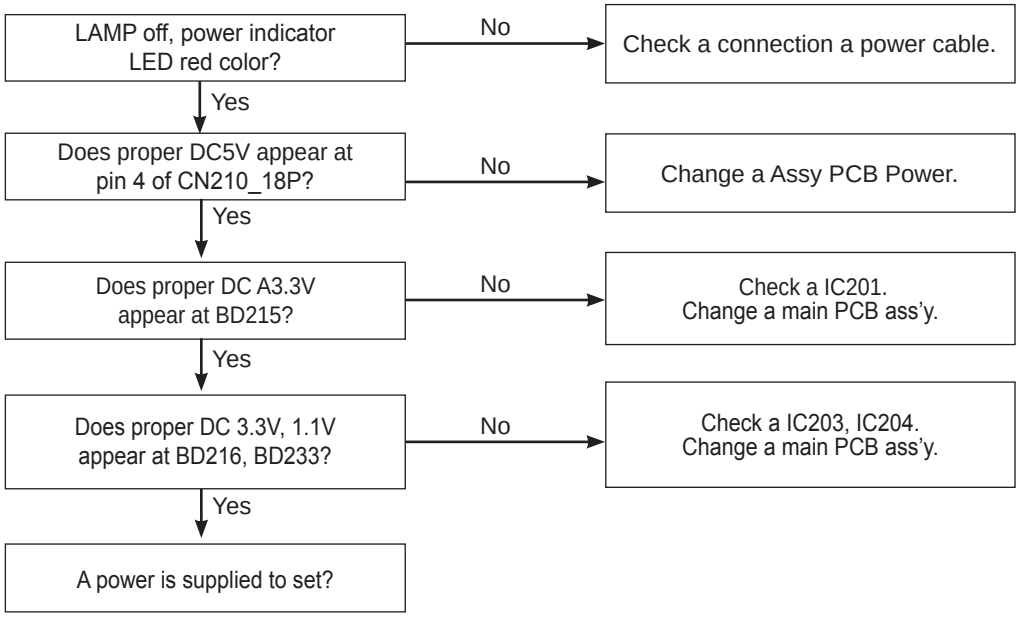
## 4-1. Troubleshooting

### 4-1-1. Previous check

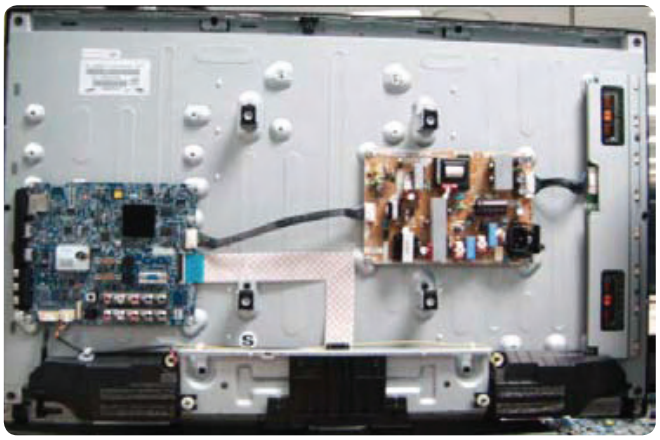
1. Check the various cable connections first.
   • Check to see if there is a burnt or damaged cable.
   • Check to see if there is a disconnected or loose cable connection.
   • Check to see if the cables are connected according to the connection diagram.
2. Check the power input to the Main Board.

## 4-1-1. No Power (SX1)

| | |
|---|---|
| Symptom | – The LEDs on the front panel do not work when connecting the power cord.<br>– The SMPS relay does not work when connecting the power cord.<br>– The units appears to be dead. |
| Major checkpoints | The IP relay or the LEDs on the front panel does not work when connecting the power cord if the cables are improperly connected or the Main Board or SMPS is not functioning. In this case, check the following:<br>– Check the internal cable connection status inside the unit.<br>– Check the fuses of each part.<br>– Check the output voltage of SMPS.<br>– Replace the Main Board. |
| Diagnostics |  |
| Caution | Make sure to disconnect the power before working on the IP board. |


LAMP off, power indicator LED red color?
No
Check a connection a power cable.
Yes
Does proper DC5V appear at pin 4 of CN210_18P?
No
Change a Assy PCB Power.
Yes
Does proper DC A3.3V appear at BD215?
No
Check a IC201. Change a main PCB ass'y.
Yes
Does proper DC 3.3V, 1.1V appear at BD216, BD233?
No
Check a IC203, IC204. Change a main PCB ass'y.
Yes
A power is supplied to set?

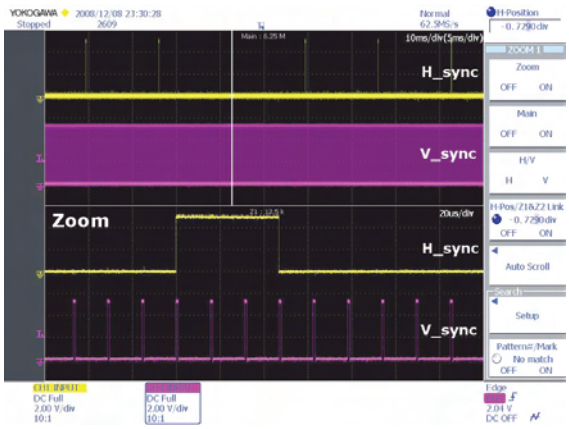
## 4-1-2. No Video (Analog PC signal) (SX1)

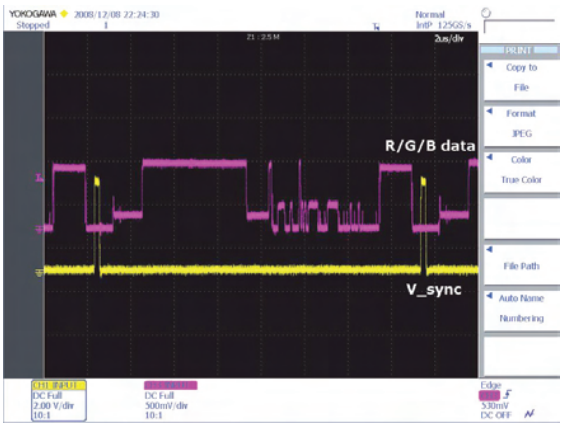
| | |
|---|---|
| Symptom | – Audio is normal but no picture is displayed on the screen. |
| Major checkpoints | – Check the PC source.<br>– Check the IC1102(SX1).<br>– This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected. |
| Diagnostics |  |
| Caution | Make sure to disconnect the power before working on the IP board. |

Power Indicator is off.
Lamp on, no video.
Yes
Check a PC source and check the connection of DSUB cable?
No
Input a analog PC signal and connected cable(DPMS).
Yes
Does the signal appear at R581(R), R582(G), R583(B) of IC1102?
No
PC cable. Change a PC. cable. Change a main PCB ass'y.
Yes
Does the digital data appear at the output of LVDS Cable?
No
IC1102. Change a main PCB ass'y.
Yes
Check a LVDS cable? Replace a lcd panel?
Yes
Please, Call to Samsung Co. LTD.

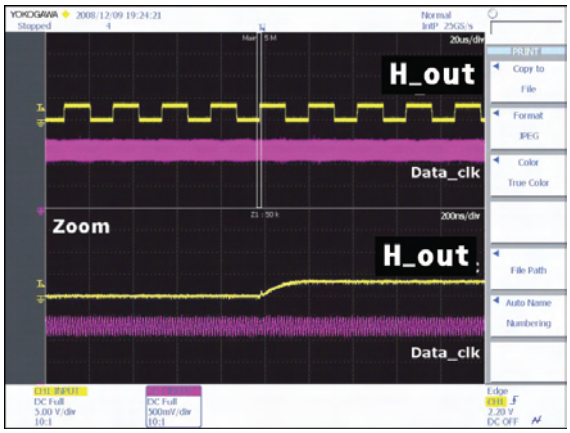
# WAVEFORMS

| | |
|---|---|
| ❶❷ | **PC input (V-sink , H-sink , R/G/B )** |

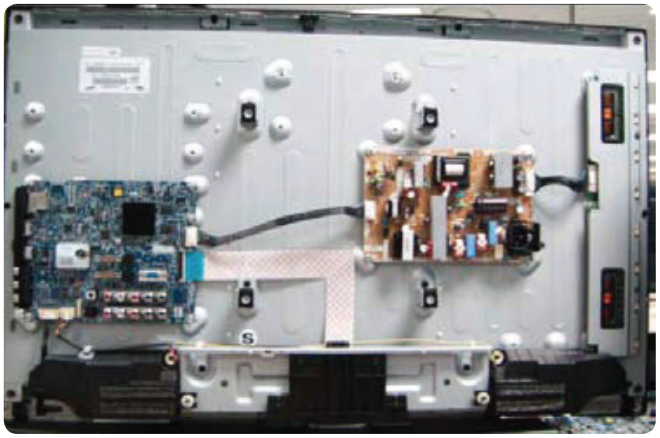



| | |
|---|---|
| ❸ | **LVDS output** |

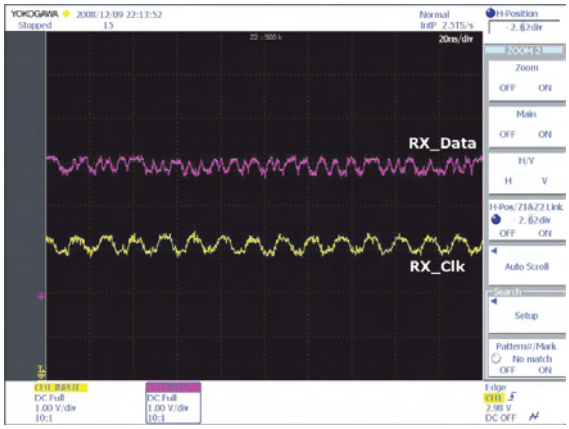


## 4-1-3. No Video (HDMI - Digital Signal) (SX1)

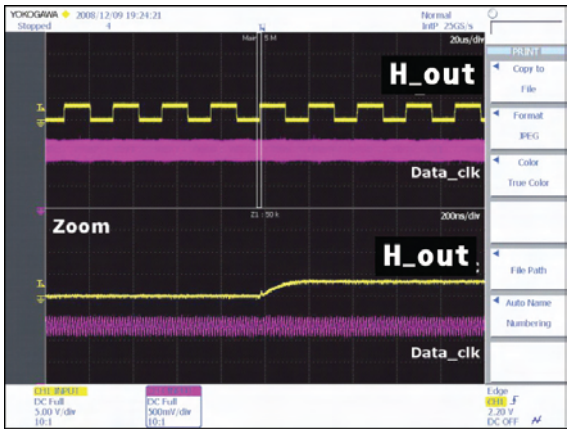
| | |
|---|---|
| Symptom | – Audio is normal but no picture is displayed on the screen. |
| Major checkpoints | – Check the HDMI source.<br>– Check the IC1102(SX1) , Check the HDMI switch<br>– This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected. |
| Diagnostics |  |
| Caution | Make sure to disconnect the power before working on the IP board. |

# WAVEFORMS

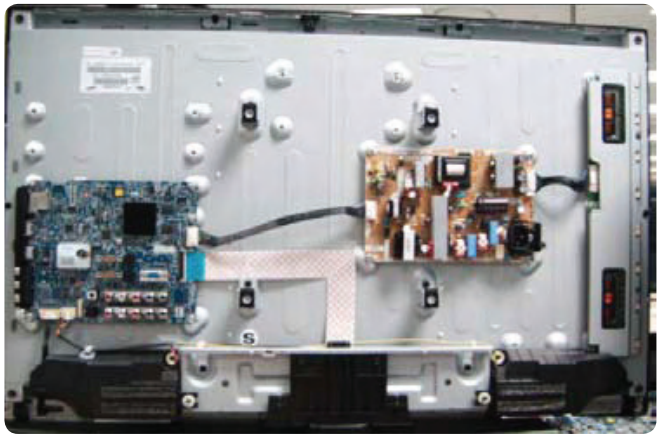
| | |
|---|---|
| ❶ | **HDMI input (RX_Data, RX_Clk)** |




| | |
|---|---|
| ❷ | **LVDS output** |

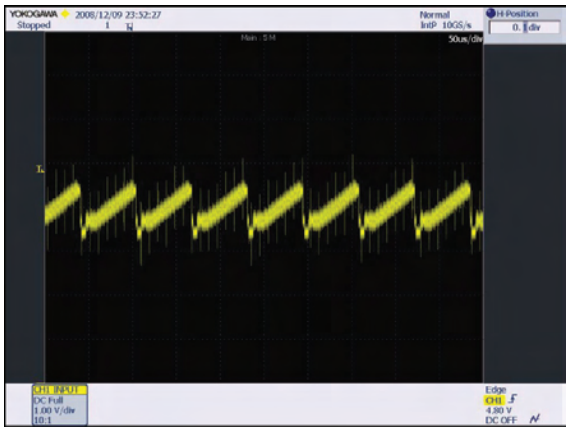


## 4-1-4. No Video (Tuner_CVBS) (SX1)

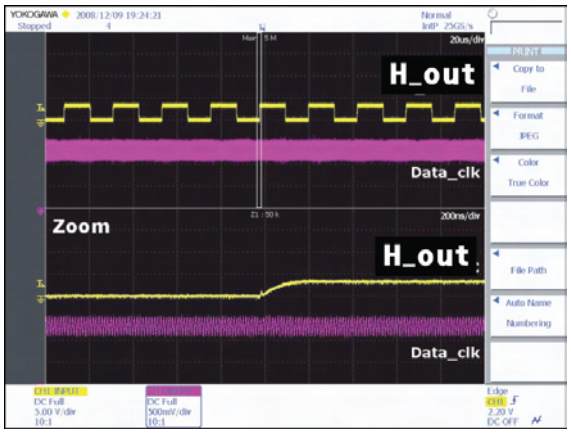
| | |
|---|---|
| Symptom | – Audio is normal but no picture is displayed on the screen. |
| Major checkpoints | – Check the Tuner CVBS source<br>– Check the M-star<br>– This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected. |
| Diagnostics |  |
| Caution | Make sure to disconnect the power before working on the IP board. |

# WAVEFORMS

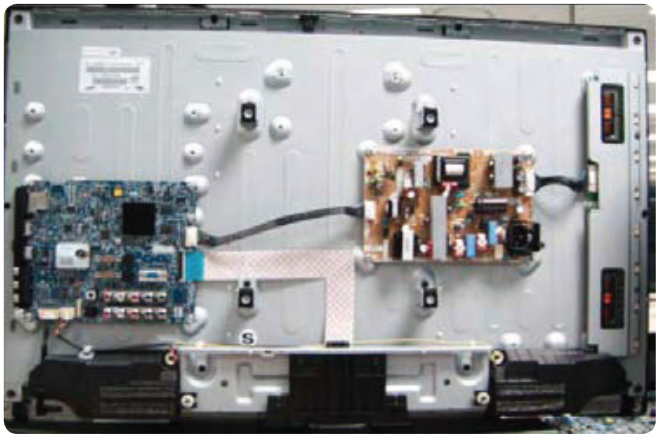
## ❶ CVBS OUT (Grey Bar)



## ❷ LVDS output

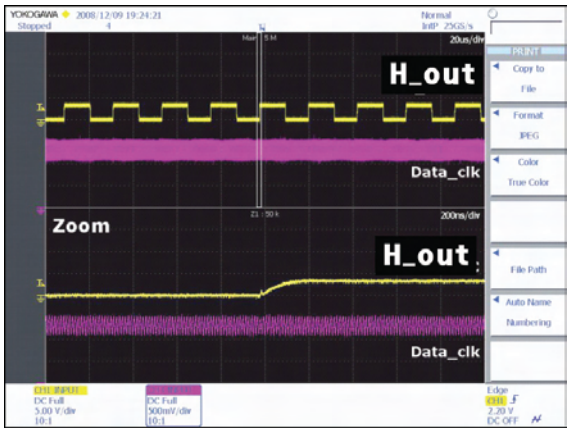


## 4-1-5. No Picture (Video_CVBS) (SX1)

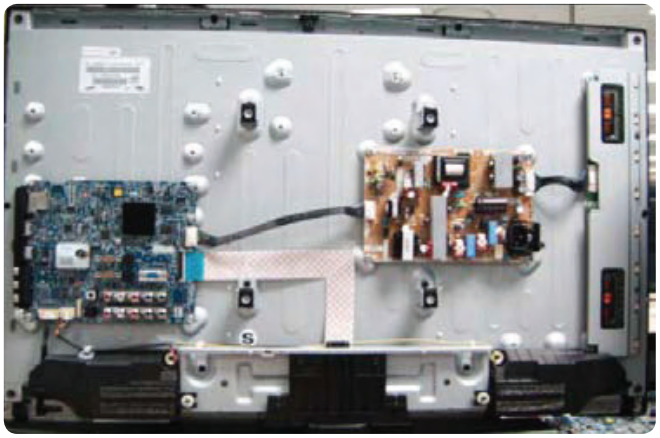
| | |
|---|---|
| Symptom | – Audio is normal but no picture is displayed on the screen. |
| Major checkpoints | – Check the Video Source<br>– Check the M-star<br>– This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected. |
| Diagnostics |  |
| Caution | Make sure to disconnect the power before working on the IP board. |

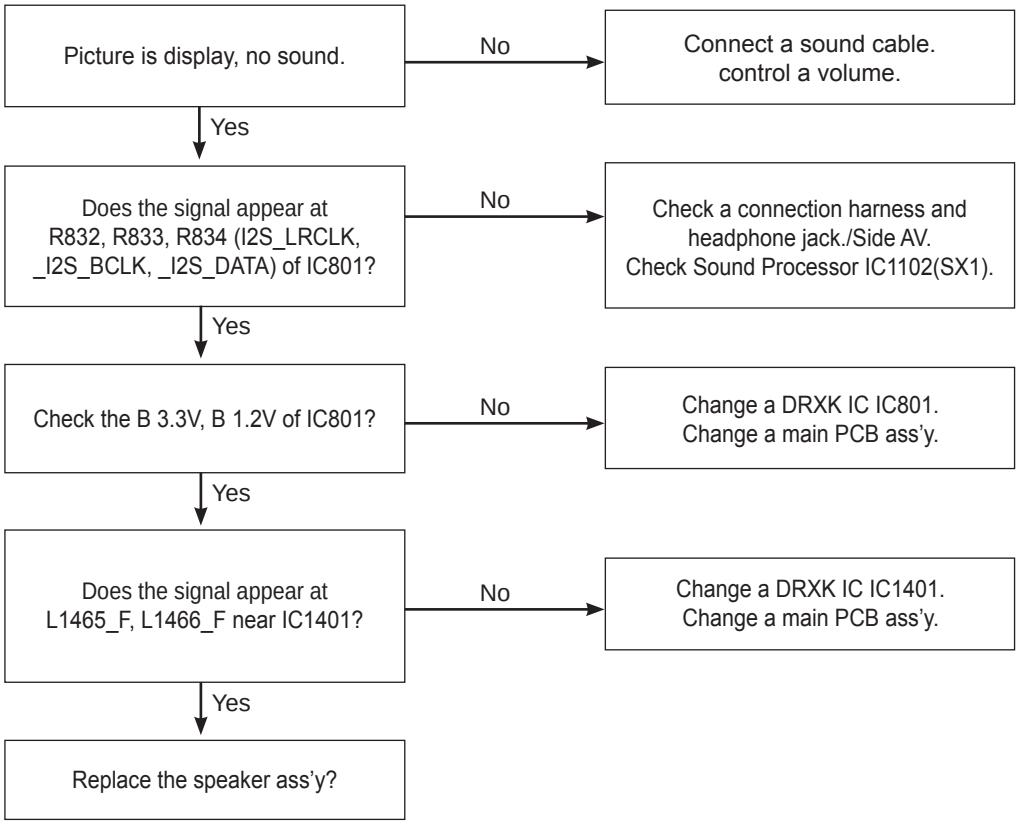
# WAVEFORMS

| | |
|---|---|
| ❶ | **LVDS output** |



## 4-1-6. No Sound (SX1)

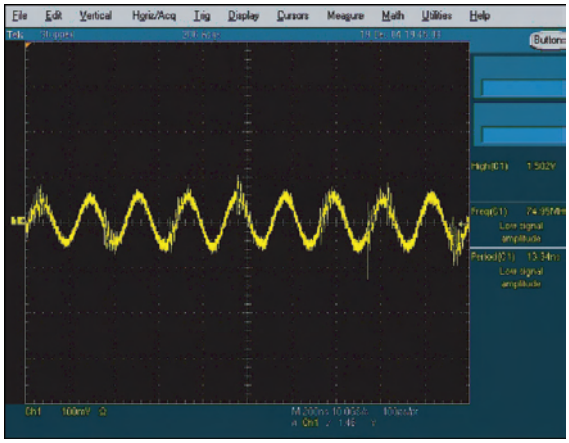
| | |
|---|---|
| Symptom | – Video is normal but there is no sound.. |
| Major checkpoints | – When the speaker connectors are disconnected or damaged.<br>– When the sound processing part of the Main Board is not functioning.<br>– Speaker defect. |
| Diagnostics |  |
| Caution | Make sure to disconnect the power before working on the IP board. |



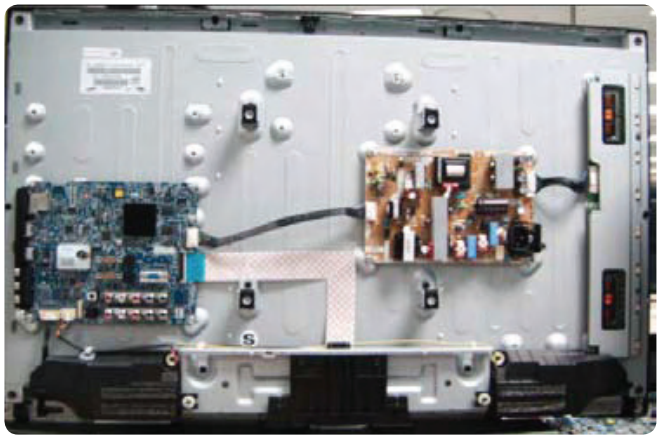
# WAVEFORMS

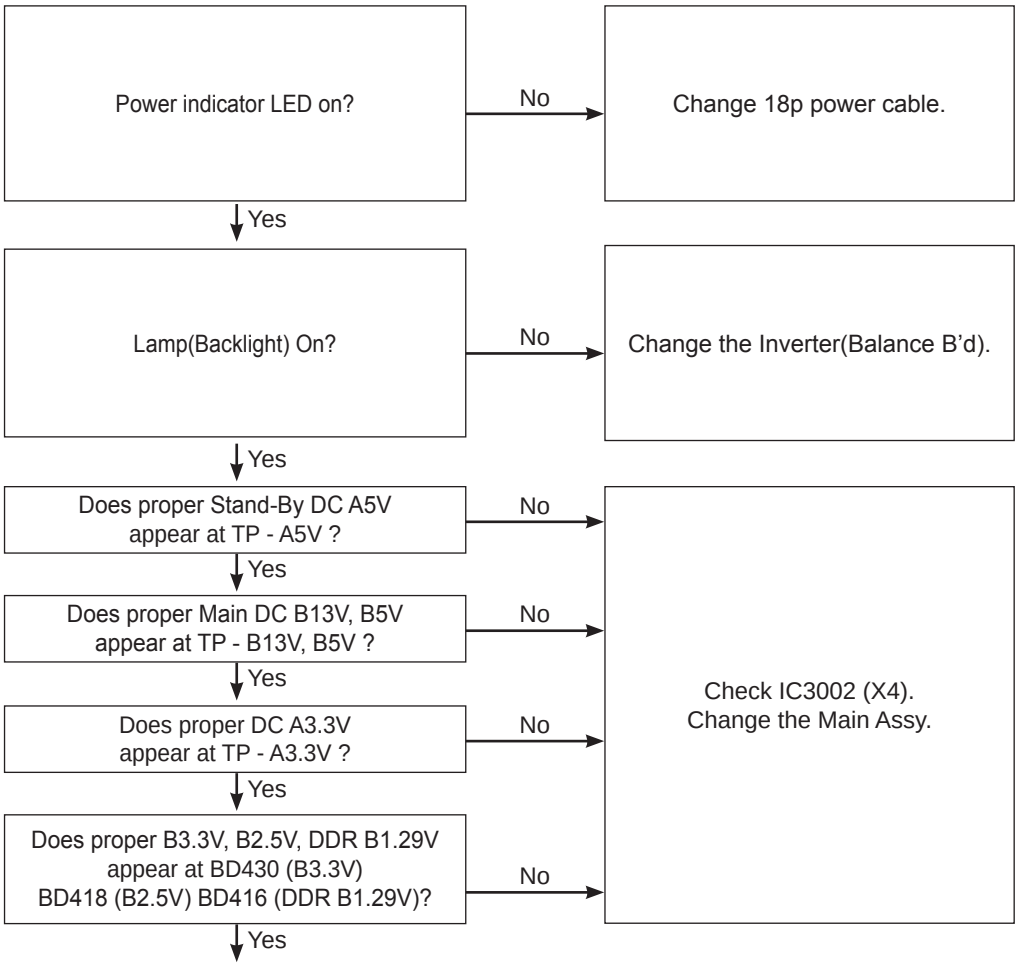
| | |
|---|---|
| ❶ | **I2S Data** |

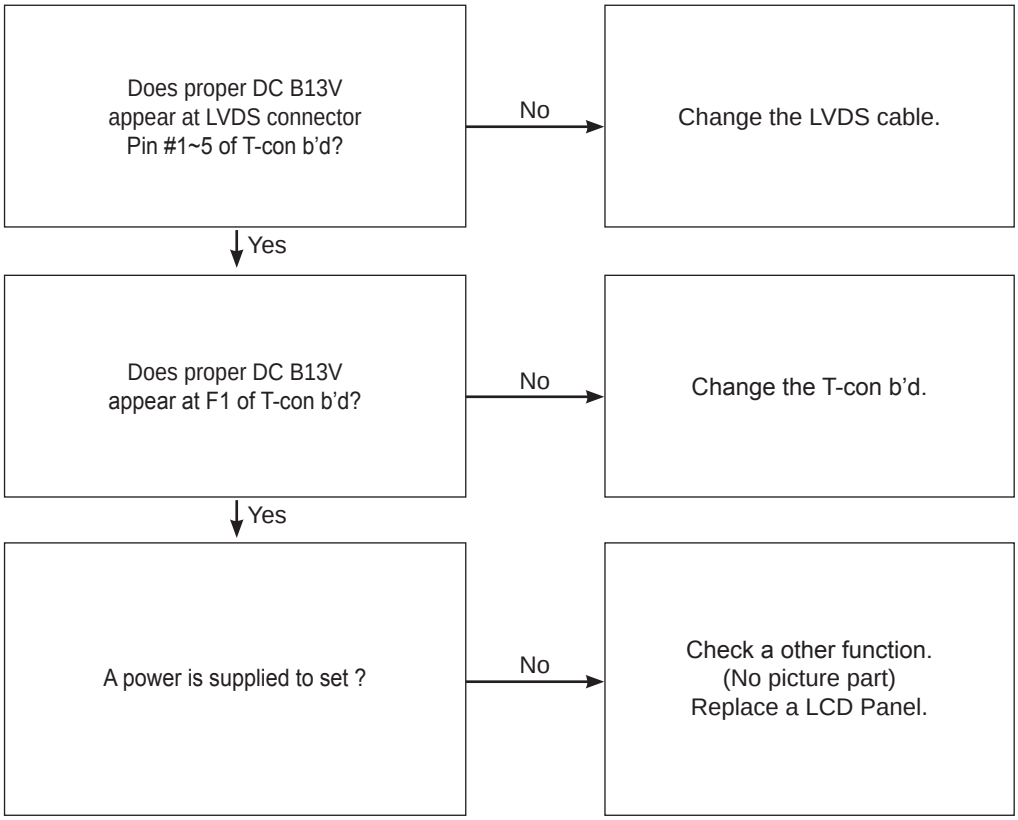
| | |
|---|---|
| ❷ | **Speaker out** |



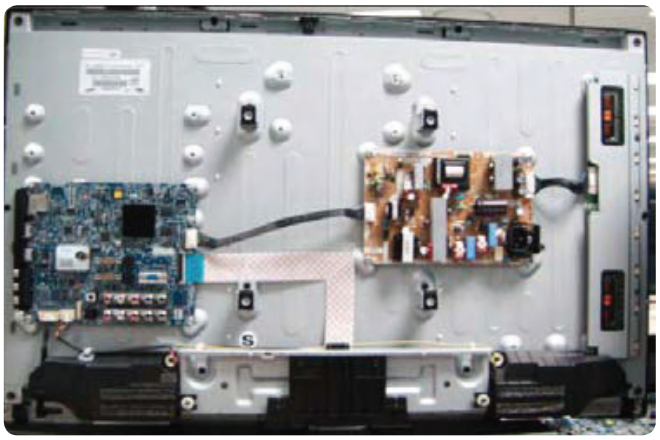
## 4-1-1. No Power (X4)

| | |
|---|---|
| Symptom | – The LEDs on the front panel do not work when connecting the power cord.<br>– The SMPS relay does not work when connecting the power cord.<br>– The units appears to be dead. |
| Major checkpoints | The IP relay or the LEDs on the front panel does not work when connecting the power cord if the cables are improperly connected or the Main Board or SMPS is not functioning.<br>In this case, check the following:<br>– Check the internal cable connection status inside the unit.<br>– Check the fuses of each part.<br>– Check the output voltage of SMPS.<br>– Replace the Main Board. |
| Diagnostics |  |



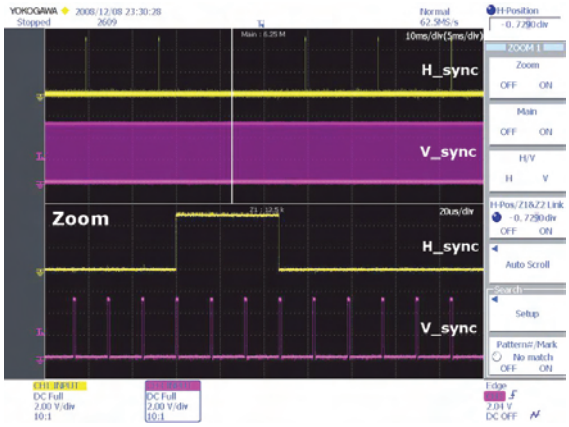
| | |
|---|---|
| Diagnostics |  |
| Caution | Make sure to disconnect the power before working on the IP board. |

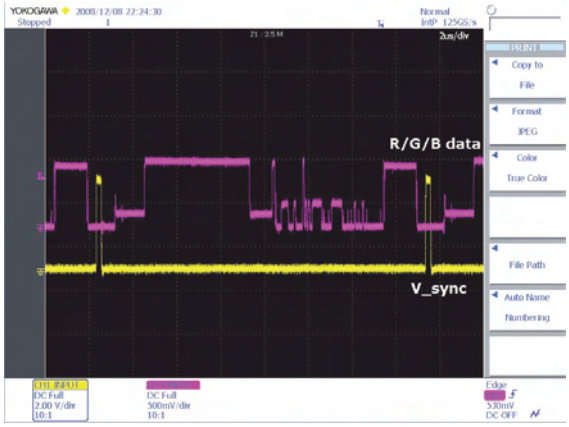
## 4-1-2. No Video_Analog PC signal (X4)

| | |
|---|---|
| Symptom | – Audio is normal but no picture is displayed on the screen. |
| Major checkpoints | – Check the PC source<br>– Check the Arsenal, Check the Chelsea.<br>– This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected. |
| Diagnostics |  |
| Caution | Make sure to disconnect the power before working on the IP board. |

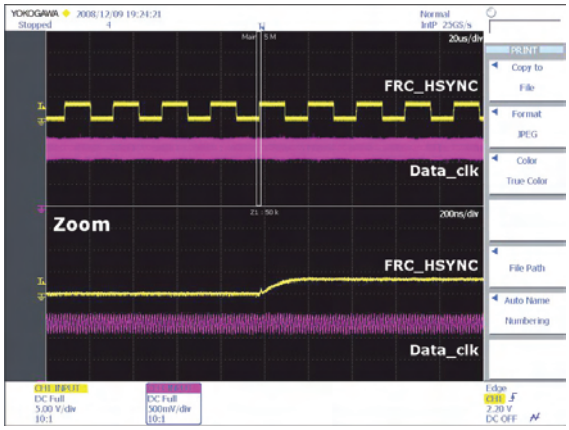
## ■ WAVEFORMS

| | |
|---|---|
| ❶ | **PC input (V-sink , H-sink , R/G/B)** |

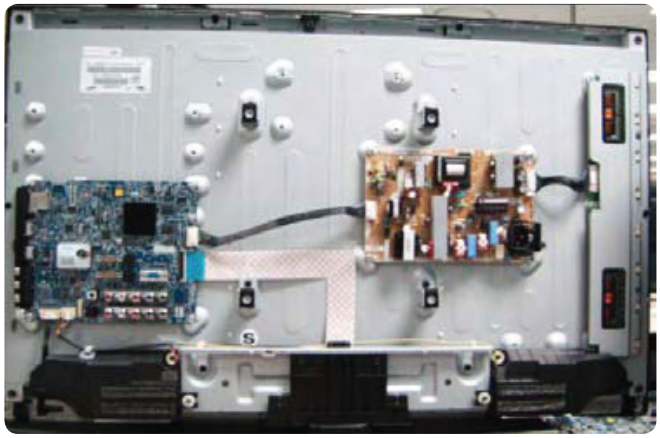



| | |
|---|---|
| ❷ | **LVDS output** |



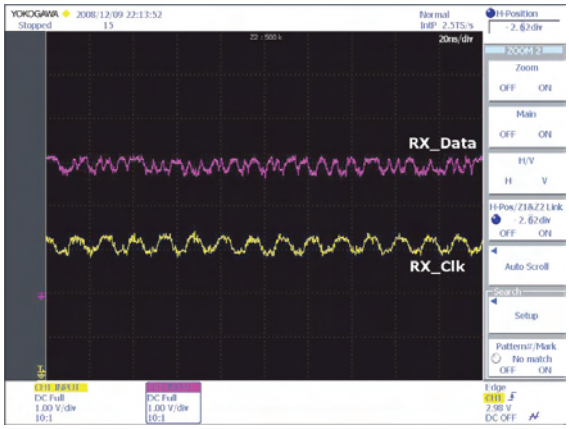
## 4-1-3. No video_HDMI1, 2, 3, 4 - Digital signal (X4)

| | |
|---|---|
| Symptom | – Audio is normal but no picture is displayed on the screen. |
| Major checkpoints | – Check the HDMI source.<br>– Check the HDMI switch, Check the Chelsea.<br>– This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected. |
| Diagnostics |  |
| Caution | Make sure to disconnect the power before working on the IP board. |

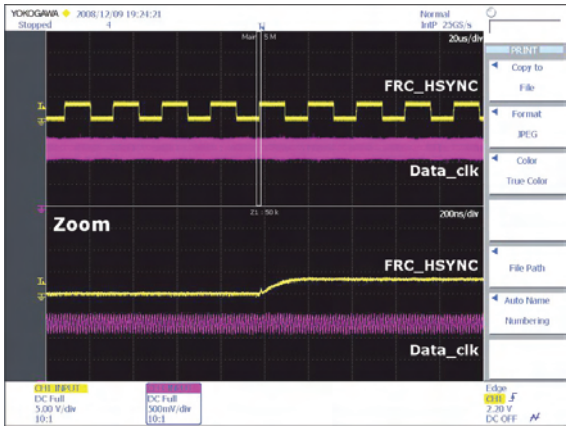
Power indicator LED is off.
Lamp(Backlight) on, no video ?
No
Check a set in the 'Stand-by mode'.
Yes
Check the HDMI source and
check the connection of HDMI cable ?
No
Input the HDMI signal properly.
Yes
Does the signal appear at CN1302 (Pin#12, #7) (HDMI1) CN1303_H2 (Pin#12, #7) (HDMI2) CN1301_550 (Pin#12, #7) (HDMI3) CN1304_SH (Pin#12, #7) (HDMI4) (HDMI RX_Clk , RX_Data) ?
No
Check CN1302, CN1303_H2, CN1301_550, CN1304_SH.
Check HDMI cable.
Change the Main Assy.
Yes
Does the digital data appear at TP-E_TXCLK+, E_TXCLK-, O_TXCLK+, O_TXCLK- ?
No
Check IC3002 (X4).
Change the Main Assy.
Yes
Check the LVDS cable?
Check the T-Con B'd?
Replace the LCD panel?
No
Please, Contact Tech support.

## ■ WAVEFORMS

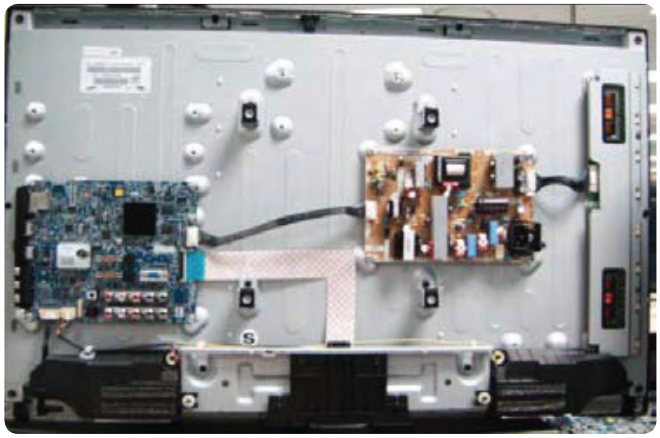
| | |
|---|---|
| ❸ | **HDMI input (RX_Data, RX_Clk)** |




| | |
|---|---|
| ❷ | **LVDS output** |

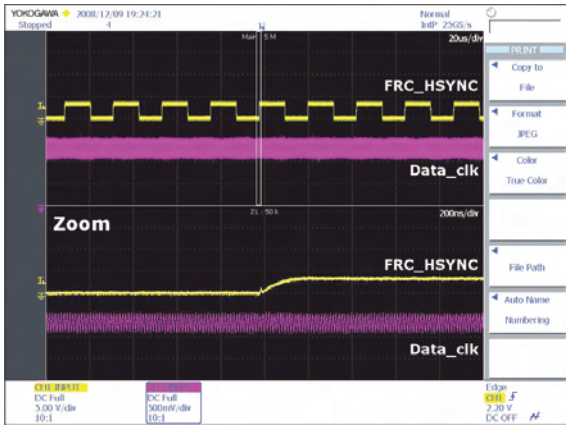


## 4-1-4. No Video_Tuner - CVBS (X4)

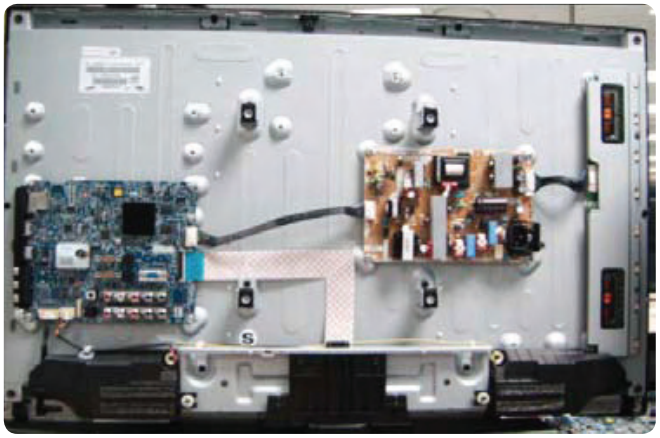
| | |
|---|---|
| Symptom | – Audio is normal but no picture is displayed on the screen. |
| Major checkpoints | – Check the Tuner CVBS source.<br>– Check the Tuner, Check the Chelsea.<br>– This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected. |
| Diagnostics |  |
| Caution | Make sure to disconnect the power before working on the IP board. |

## ■ WAVEFORMS

| | |
|---|---|
| ❷ | **LVDS output** |

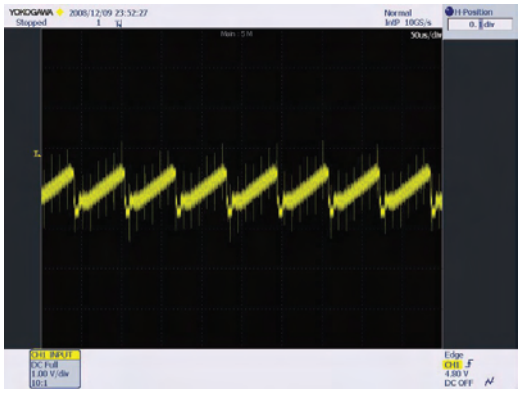


## 4-1-5. No Video_Video CVBS (X4)

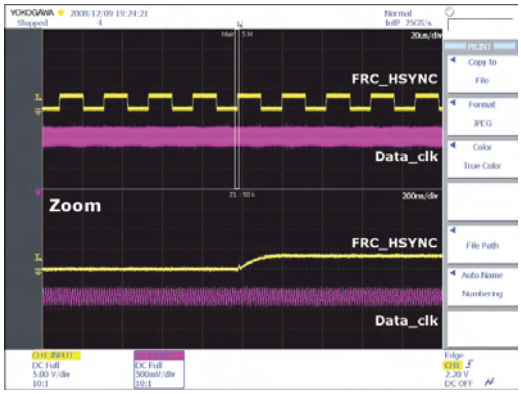
| | |
|---|---|
| Symptom | – Audio is normal but no picture is displayed on the screen. |
| Major checkpoints | – Check the Video CVBS source<br>– Check the Chelsea.<br>– This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected. |
| Diagnostics |  |
| Caution | Make sure to disconnect the power before working on the IP board. |

## ■ WAVEFORMS

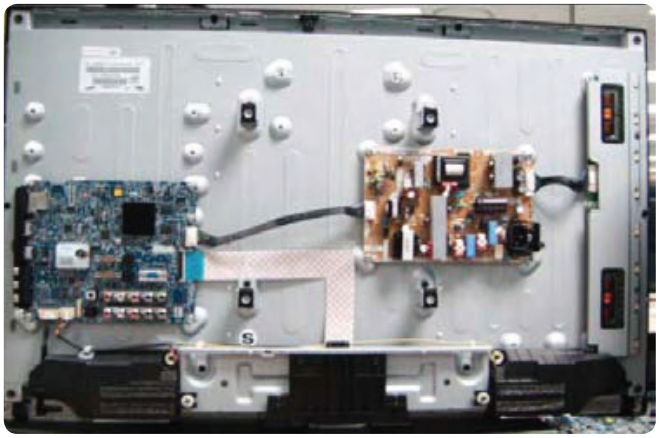
| | |
|---|---|
| ❹ | **CVBS OUT (Grey Bar)** |



| | |
|---|---|
| ❷ | **LVDS output** |



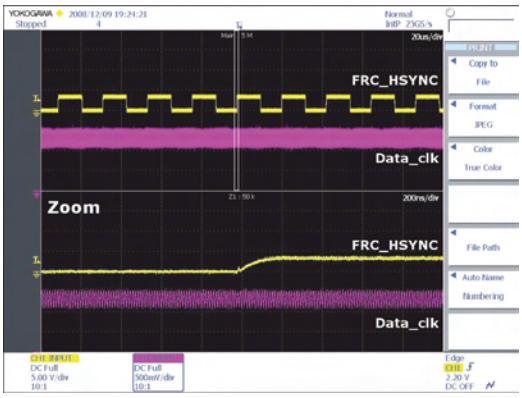
## 4-1-6. No Video_Component (X4)

| | |
|---|---|
| Symptom | – Audio is normal but no picture is displayed on the screen. |
| Major checkpoints | – Check the Component source<br>– Check the chelsea.<br>– This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected. |
| Diagnostics |  |
| Caution | Make sure to disconnect the power before working on the IP board. |

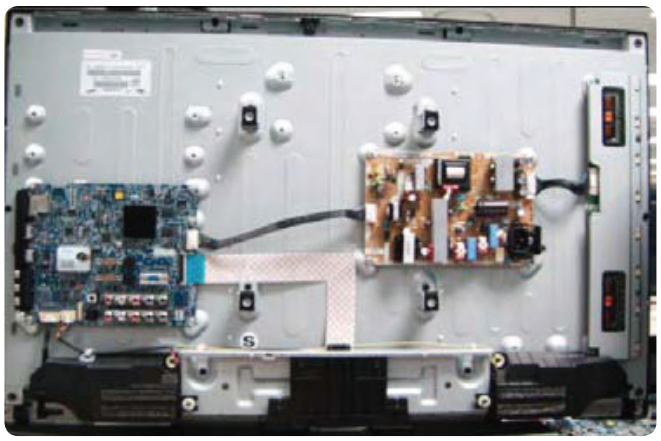
## ■ WAVEFORMS

| | |
|---|---|
| ❺ | **Compnent_Y (Gray scale) / Pb / Pr (Color bar)** |

| | |
|---|---|
| ❷ | **LVDS output** |



## 4-1-7. No Sound (X4)

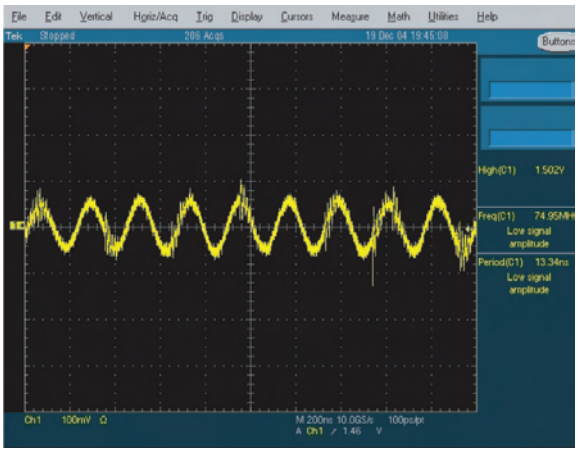
| | |
|---|---|
| Symptom | – Video is normal but there is no sound.. |
| Major checkpoints | – When the speaker connectors are disconnected or damaged.<br>– When the sound processing part of the Main Board is not functioning.<br>– Speaker defect.. |
| Diagnostics |  |

Check the source and check the connection of sound cable (Comp/PC/DVI to HDMI) ?
No
Input the video source properly.
Yes
Does the sound data appear at TP - COMP1_AV1_SL_IN, COMP1_AV1_SR_IN (AV1, COMP1)
TP - COMP2_SL, COMP2_SR (Comp2)
TP - SIDE_AV_AV2_SL_IN, SIDE_AV_AV2_SR_IN(AV2)
TP - PC_DVI_SL_IN, PC_DVI_SR_IN (PC/DVI) ?
No
Check CN1101, CN1107_N22 (CN1107_22), CN1203.
Change the Main Assy.
Yes
Does the DC B3.3V, B13V appear at TP - B3.3V, B13V?
No
Check IC3002 (X4).
Change the Main Assy.
Yes
Replace speaker?
No
Please, Contact Tech support.

| | |
|---|---|
| Caution | Make sure to disconnect the power before working on the IP board. |

## ■ WAVEFORMS

| | |
|---|---|
| ❼ | **Speaker out** |



# 4-2. Alignments and Adjustments

## 4-2-1. General Alignment Instuction

1. Usually, a color LCD-TV needs only slight touch-up adjustment upon installation. Check the basic characteristics such as height, horizontal and vertical sync.
2. Use the specified test equipment or its equivalent.
3. Correct impedance matching is essential.
4. Avoid overload. Excessive signal from a sweep generator might overload the front-end of the TV. When inserting signal markers, do not allow the marker generator to distort test result.
5. Connect the TV only to an AC power source with voltage and frequency as specified on the backcover nameplate.
6. Do not attempt to connect or disconnect any wire while the TV is turned on. Make sure that the power cord is disconnected before replacing any parts.
7. To protect against shock hazard, use an isolation transformer.

# 4-3. Factory Mode Adjustments

## 4-3-1 Entering Factory Mode

To enter 'Service Mode' Press the remote -control keys in this sequence :
- If you do not have Factory remote - control

Info → Menu → Mute → POWER ON

## 4-3-2 How to Access Service Mode

**Using the Customer Remote**

1. Turn the power off and set to stand-by mode
2. Press the remote buttons in this order to turn the set on.
3. The set turns on and enters service mode. This may take approximately 20 seconds.
4. Press the Power button to exit and store data in memory.
   - If you fail to enter service mode, repeat steps 1 and 2 above.
5. Initial SERVICE MODE DISPLAY State

| SX1 |
|---|
| **Option** |
| Control |
| SVC |
| ADC/WB |
| Advanced |
| T-TDT5DAAC-XXX<br>T-TDT5DAAC-XXX<br>EDID SUCCESS<br>CALIB : AV X COM X PC X HDMI X<br>Option : XXXX XXXX XXXX X<br><br>SDAL-XXX<br>RFS : 0130 T-TDT5DAAC<br>20XX-XX-XX<br>TYPE : XX<br>MODEL : XXXXX<br>MAC FAIL<br>FACTORY DATA VER : XXX<br>EERC VERSION : XXX<br>DTP-AP-COMP-310-01<br>DTP-HIIG-0304<br>DTP-BP-0314<br>DATE OF PURCHASE : XX/XX/XX |

| X4 |
|---|
| **Option** |
| Control |
| SVC |
| ADC/WB |
| Advanced |
| T-MSX5DAAC-XXX<br>T-MSX5DAAC-XXX<br>EDID SUCCESS<br>CALIB : AV X COM X PC X HDMI X<br>Option : XXXX XXXX XXXX X<br><br>SDAL-XXX<br>RFS : P0154 T-MSX5DAAC<br>20XX-XX-XX<br>TYPE : XX<br>MODEL : XXXXX<br>MAC FAIL<br>FACTORY DATA VER : XXX<br>EERC VERSION : XXX<br>DTP-AP-COMP-310-01<br>DTP-HIIG-0304<br>DTP-BP-0314<br>DATE OF PURCHASE : XX/XX/XX |

* How to enter the hidden factory mode.
  a. into the factory mode
  b. move the tap to Advanced
  c. key input : 0 + 0 + 0 + 0
  ** hidden menu : Advanced

6. Buttons operations withn Service Mode

| | |
|---|---|
| Menu | Full Menu Display/Move to Parent Menu |
| Direction Keys ▲/▼ | Item Selection by Moving the Cursor |
| Direction Keys ◄/► | Data Increase / Decrease for the Selected Item |
| Source | Cycles through the active input source that are connected to the unit |

## 4-3-3 Factory Data (SX1)

### ■ Option

| OPTION | Factory Name | Data | Range |
|---|---|---|---|
| | Factory Reset | | |
| | Type | | NONE/19O6TH0C/19A6TH0C/22I6TH0C/22A6TH0C/22D6TH0C/22P6TH0C/26A6AH0C/26D6AH0C/26L6AH0C/26P6AH0C/32A6AH0C32D6AH0C/32L6AH0C32P6AH0C/32A6AF0C/32L6AF0C/32A1AF0C/32L1AF0C/37L6AF0C/37L1AF0C/40A6AF0C/40D6AF0C/40L6AF0C/40A1AF0C/40L1AF0C/40A1UF0C/40D1UF0C/40L1UF0C/46A6AF0C/46D6AF0C/46L6AF0C/46A1AF0C/46L1AF0C/46A1UF0C/46D1UF0C/46L1UF0C/55A1UF0C/55L1UF0C/65L1UF0C/19R6TH0E/22D6TH0E/26D6AH0E/32D6AH0E32D6UF0E/32A1UF0E/32D1UF0E/37L6UF0E/37D1UF0E/37L1UF0E/40D6UF0E/40A1UF0E/40D1UF0E/46D6UF0E/46L6UF0E/46A1UF0E/46D1UF0E/46L1UF0E/55A1UF0E/55D1UF0E/55L1UF0E/65L1UF0E/42HHcD3/50HHcD450FArN4/50FArV458FArN1/58FArV163FArN1/ |
| | Local Set | … | |
| | Model | LC550<br>LC540<br>LC530<br>LC450 | LC350/LC450/LC450H/LC451LC452/LC457HLC459H/LC480/<br>LC530/LC530H/LC539H/LC540/LC550/LC560/LC580/LC570/<br>LC610/LC620/LC630/LC631/LC632/LC633/LC640/LC650/LC652/<br>LC653/LC654/LC670/<br>UC400/UC400H/UC4010/UC5000/UC5100/UC6000/UC6200/<br>UC6300/UC6400/UC6400H/UC6500/UC6510/UC6530/UC6540/<br>UC6550/UC6600/UC6620/UC6630/UC6700/UC6720/UC6730/<br>UC6740/UC6800/UC6830/UC6900/UC6900H/UC8000/<br>PC420/PC430/PC431/PC432/PC450/PC451/PC480/PC520/<br>PC530/PC531/PC540/PC541/PC550/PC551/PC560/PC580/<br>PC590/PC670/PC6100/PC6400/PC6500/PC7000/PC7700/PC8000 |
| | TUNER | DRX3900J | |
| | DDR | 0 | |
| | Country | USA | |
| | Front Color | | NONE/W-MILKY/T-M-Brn/T-W-Brn/T-W-Gray/W-D-Gray/W-M-Whit/W-Violet/T-C-Gray/T-R-BLK/S-BLK/S-RBLK/S-C-Gray/ |

## ■ Control

| Control | Factory Name |
|---|---|
| | EDID |
| | Sub Option |
| | PDP Option |
| | Hotel Option |
| | Shop Option |
| | Asia Option |
| | Sound |
| | Config Option |
| | SCC |

| EDID | Factory Name | Data | Range |
|---|---|---|---|
| | EDID ON/OFF | Off | |
| | EDID WRITE ALL | … | |
| | EDID WRITE PC | … | |
| | EDID WRITE HDMI | … | |
| | EDID WRITE HDMI1 | … | |
| | EDID WRITE HDMI2 | … | |
| | EDID WRITE HDMI3 | … | |
| | EDID WRITE HDMI4 | … | |
| | EDID 1.2 PORT | … | |
| | EDID WRITE DVI | … | |

| Sub Option | Factory Name | Data | Range |
|---|---|---|---|
| | RF Mute Time | 600ms | 0ms~1000ms |
| | RS-232 Jack | UART | Debug/Login/UART |
| | Watchdog | OFF | ON/OFF |
| | WD Count | 0 | 255 |
| | Dimm Type | EXT | fixed |
| | Lvds Format | JEIDA | JEIDA/VESA/19INCH |
| | MediaPlay DB | On whth 5MB | fixed |
| | MediaPlay Movie | chapterinMedia | fixed |
| | MediaPlay DLNA | OFF | fixed |
| | MediaPlay PlayList | OFF | fixed |
| | OTN Server Type | operationg | operation/development |
| | OTN Test Server | OFF | OFF/ A/B/C/D/E Zone |
| | OTN Support | ON | ON/OFF |
| | OTN Reset | | not modifyed |
| | OTN Duration | OFF | ON/OFF |
| | OTN Fail Test | OFF | ON/OFF |
| | T-CON USB Download | Failure | fixed |
| | View Log | | not modifyed |
| | SST | | not modifyed |
| | 2nd mips | ON | ON/OFF |
| | 2nd mips count | 0 | 0~255 |
| | Region | USA | fixed |
| | PC Auto Ident | Enable | Auto/Enable |

| Hotel Option | Factory Name | Data | Range |
|---|---|---|---|
| | Hotel Mode | OFF | |
| | SI Vender | … | |
| | Power On Channel | … | |
| | Channel Type | … | |
| | Power On Volume | … | |
| | Min Volume | … | |
| | Max Volume | … | |
| | Panel Button Lock | … | |
| | Power On Source | … | |

| Shop Option | Factory Name | Data | Range |
|---|---|---|---|
| | Shop Mode | OFF | ON/OFF |
| | Exhibition Mode | OFF | ON/OFF |

| Sound | Factory Name | Data | Range |
|---|---|---|---|
| | High Devi | OFF | ON/OFF |
| | Carrier_Mute | ON | ON/OFF |
| | Speaker Delay Normal | 10 | 0~255 |
| | Pilot Level High Thld | 0x70h | 0x00~0xff |
| | Pilot Level Low Thld | 0x20h | 0x00~0xff |
| | Speaker EQ | ON | ON/OFF |
| | SPDIF PCM Gain | -9dB | -10dB~0dB |

## ■ SVC

| SVC | Factory Name | Data | Range |
|---|---|---|---|
| | Test Pattern | | fixed |
| | Panel Display Time | 0Hr | |
| | Tuner Status | | |

| Test Pattern | Factory Name | Data | Range |
|---|---|---|---|
| | Pattern Sel | OFF | OFF/ White/Grey/Black/Red/Green/Blue |
| | RFC PC Mode | OFF | ON/OFF |
| | Logic Pattern Sel | … | Not modified |
| | Logic Level Sel | … | Not modified |

| TUNER STATUS | Factory Name | Data | Range |
|---|---|---|---|
| | DVB | | |
| | ISDB-T | | |

| DVB | Factory Name | Data | Range |
|---|---|---|---|
| | SNR | | Not modified |
| | BER | | Not modified |
| | Singal Strength | | Not modified |
| | Bandwidth | | Not modified |
| | Frequency | | Not modified |
| | LNA Status | | Not modified |
| | FFT | | Not modified |
| | Modulation | | Not modified |
| | Code Rate | | Not modified |
| | GI | | Not modified |
| | Hier Modulation | | Not modified |
| | Frequency Offset | | Not modified |
| | Timing Offset | | Not modified |
| | AGC | | Not modified |
| | UCB | | Not modified |
| | PLL Type | | Not modified |
| | DEMOD Type | | Not modified |
| | TPS LOCK | | Not modified |
| | RS Lock | | Not modified |
| | SSI | | Not modified |
| | SQI | | Not modified |

| ISDB-T | Factory Name | Data | Range |
|---|---|---|---|
| | FFT Size_1 | | Not modified |
| | Guard Interval_1 | | Not modified |
| | Freq. Offset_1 | | Not modified |
| | SNR_1 | | Not modified |
| | IF AGC_1 | | Not modified |
| | TMCC Lock_1 | | Not modified |
| | TS Packet_1 | | Not modified |
| | Master Lock_1 | | Not modified |
| | A_Modulation_1 | | Not modified |
| | A_Code Rate_1 | | Not modified |
| | A_Timer InterLeave_1 | | Not modified |
| | A_Segments Num_1 | | Not modified |
| | A_Ber_1 | | Not modified |
| | B_Modulation_! | | Not modified |
| | B_Code Rate_1 | | Not modified |
| | B_Timer InterLeave_1 | | Not modified |
| | B_Segments Num_1 | | Not modified |
| | B_BER_1 | | Not modified |
| | C_Modulation_1 | | Not modified |
| | C_Code Rate_1 | | Not modified |
| | C_Timer InterLeave_1 | | Not modified |
| | C_Segments Num_1 | | Not modified |
| | C_BER_1 | | Not modified |

## ■ Expert

| Expert | Factory Name | Data | Range |
|---|---|---|---|
| | N / D ADJ | Off | Off / On / FIX |
| | SOURCE | ... | Not modified |

## ■ ADC/WB

| ADC/WB | Factory Name |
|---|---|
| | ADC |
| | ADC Target |
| | ADC RESULT |
| | WB |

| ADC | Factory Name | Data | Range |
|---|---|---|---|
| | AV Calibration | Success | Success / Failure |
| | Comp Calibration | Success | Success / Failure |
| | PC Calibration | Success | Success / Failure |
| | HDMI Calibration | Success | Success / Failure |

| ADC Target | Factory Name | Data | Range |
|---|---|---|---|
| | 1st_AV_Low | 18 | 0 ~ 255 |
| | 1st_AV_High | 220 | 0 ~ 255 |
| | 1st_AV_Delta | 1 | 0 ~ 255 |
| | 1st_COMP_Low | 16 | 0 ~ 255 |
| | 1st_COMP_High | 235 | 0 ~ 255 |
| | 1st_COMP_Delta | 1 | 0 ~ 255 |
| | 1st_PC_Low | 2 | 0 ~ 255 |
| | 1st_PC_High | 235 | 0 ~ 255 |
| | 1st_PC_Delta | 1 | 0 ~ 255 |
| | 2nd_Low | 1 | 0 ~ 255 |
| | 2nd_High | 235 | 0 ~ 255 |
| | 2nd_Delta | 1 | 0 ~ 255 |

| ADC RESULT | Factory Name | Data | Range |
|---|---|---|---|
| | 1st_AV_Gain | 127 | 0 ~ 255 |
| | 1st_AV_Offset | 139 | 0 ~ 255 |
| | 1st_Comp_Gain | 68 | 0 ~ 255 |
| | 1st_Comp_Gain_Cb | 68 | 0 ~ 255 |
| | 1st_Comp_Gain_Cr | 68 | 0 ~ 255 |
| | 1st_Comp_Offset | 127 | 0 ~ 255 |
| | 1st_Comp_Offset_Cb | 127 | 0 ~ 255 |
| | 1st_Comp_Offset_Cr | 127 | 0 ~ 255 |
| | 1st_PC_R_Gain | 96 | 0 ~ 255 |
| | 1st_PC_G_Gain | 95 | 0 ~ 255 |
| | 1st_PC_B_Gain | 94 | 0 ~ 255 |
| | 1st_PC_R_Offset | 127 | 0 ~ 255 |
| | 1st_PC_G_Offset | 127 | 0 ~ 255 |
| | 1st_PC_B_Offset | 127 | 0 ~ 255 |
| | 2nd_R_Offset | 110 | 0 ~ 255 |
| | 2nd_G_Offset | 110 | 0 ~ 255 |
| | 2nd_B_Offset | 110 | 0 ~ 255 |
| | 2nd_R_Gain | 165 | 0 ~ 255 |
| | 2nd_G_Gain | 165 | 0 ~ 255 |
| | 2nd_B_Gain | 165 | 0 ~ 255 |

| WB | Factory Name | Data | Range |
|---|---|---|---|
| | Sub Brightness | 128 | 0 ~ 255 |
| | R_Offset | 128 | 0 ~ 255 |
| | G_Offset | 128 | 0 ~ 255 |
| | B_Offset | 128 | 0 ~ 255 |
| | Sub Contrast | 128 | 0 ~ 255 |
| | R_Gain | 128 | 0 ~ 255 |
| | G_Gain | 128 | 0 ~ 255 |
| | B_Gain | 128 | 0 ~ 255 |
| | Movie R Offset | 122 | 0 ~ 255 |
| | Movie B Offset | 145 | 0 ~ 255 |
| | Movie R Gain | 156 | 0 ~ 255 |
| | Movie B Gain | 39 | 0 ~ 255 |

# 4-3-5. Factory Data (X4)

## ■ Option

| OPTION | Factory Name | Data | Range | Remark |
|---|---|---|---|---|
| | Factory Reset | | | |
| | Type | 26D6AH0C<br>32D6AH0C<br>32L6AF0C<br>37L6AF0C<br>40D6AF0C<br>46L6AF0C | NONE/19O6TH0C/19A6TH0C/22I6TH0C/22A6TH0C/22D6TH0C/22P6TH0C/26A6AH0C/26D6AH0C/26L6AH0C/26P6AH0C/32A6AH0C/32D6AH0C/32L6AH0C/32P6AH0C/32A6AF0C/32L6AF0C/32A1AF0C/32L1AF0C/37L6AF0C/37L1AF0C/40A6AF0C/40D6AF0C/40L6AF0C/40A1AF0C/40L1AF0C/40A1UF0C/40D1UF0C/40L1UF0C/46A6AF0C/46D6AF0C/46L6AF0C/46A1AF0C/46L1AF0C/46A1UF0C/46D1UF0C/46L1UF0C/55A1UF0C/55L1UF0C/65L1UF0C/19O6TH0E/22D6TH0E/26D6AH0E/32D6AH0E/32D6UF0E/32A1UF0E/32D1UF0E/37L6UF0E/37D1UF0E/37L1UF0E/40D6UF0E/40A1UF0E/40D1UF0E/46D6UF0E/46L6UF0E/46A1UF0E/46D1UF0E/46L1UF0E/55A1UF0E/55D1UF0E/55L1UF0E/65L1UF0E/42HHcD3/50HHcD450FArN4/50FArV458FArN1/58FArV163FArN1/ | |
| | Local Set | … | | |
| | Model | LC450<br>LC530<br>LN540<br>LC550 | LC350/LC450/LC450H/LC451LC452/LC457HLC459H/LC480/LC530/LC530H/LC539H/LC540/LC550/LC560/LC580/LC570/LC610/LC620/LC630/LC631/LC632/LC633/LC640/LC650/LC652/LC653/LC654/LC670/UC4000/UC4000H/UC4010/UC5000/UC5100/UC6000/UC6200/UC6300/UC6400/UC6400H/UC6500/UC6510/UC6530/UC6540/UC6550/UC6600/UC6620/UC6630/UC6700/UC6720/UC6730/UC6740/UC6800/UC6830/UC6900/UC6900H/UC8000/PC420/PC430/PC431/PC432/PC450/PC451/PC480/PC520/PC530/PC531/PC540/PC541/PC550/PC551/PC560/PC580/PC590/PC670/PC6100/PC6400/PC6500/PC7000/PC7700/PC8000 | |
| | TUNER | SEMCO081A | SEMPA081/SEMCO081A/ALPSK02A/Error | |
| | DDR | 0 | 0~2 | |
| | Light Effect | OFF | ON/OFF | INFO+FACTORY |
| | Ch Table | … | NONE/SUWON/SAMEX | |
| | Country | USA | USA/PANAMA | |
| | Front Color | T-R-BLK<br>S-R-BLK | NONE/W-MILKY/T-M-Brn/T-W-Brn/T-W-Gray/W-D-Gray/W-M-Whit/W-Violet/T-C-Gray/T-R-BLK/S-BLK/S-R-BLK/S-C-Gray/ | |

## ■ Control

**Control**

| Factory Name | Range | Remark |
|---|---|---|
| EDID | SUB MENU | |
| Sub Option | SUB MENU | |
| PDP Option | | |
| Hotel Option | SUB MENU | |
| Shop Option | SUB MENU | |
| Asia Option | SUB MENU | INFO+FACTORY |
| Sound | SUB MENU | |
| Config Option | SUB MENU | INFO+FACTORY |
| SCC | SUB MENU | INFO+FACTORY |

**EDID**

| Factory Name | Data | Range | Remark |
|---|---|---|---|
| EDID ON/OFF | Off | ON/OFF | |
| EDID WRITE ALL | Success | Success/failure | |
| EDID WRITE PC | Success | Success/failure | |
| EDID WRITE HDMI | … | Success/failure | |
| EDID WRITE HDMI1 | Success | Success/failure | |
| EDID WRITE HDMI2 | Success | Success/failure | |
| EDID WRITE HDMI3 | Success | Success/failure | |
| EDID WRITE HDMI4 | Success | Success/failure | |
| EDID 1.2 PORT | NONE | NONE/Not Support/HDMI2/HDMI3/HDMI4 | |
| EDID WRITE DVI | … | fixed | |

**Sub Option**

| Factory Name | Data | Range | Remark |
|---|---|---|---|
| RF Mute Time | 600ms | 0ms~1000ms | |
| RS-232 Jack | UART | Debug/Login/UART | |
| Watchdog | OFF | ON/OFF | |
| WD Count | 0 | 0~255 | |
| Dimm Type | EXT | fixed | |
| Lvds Format | JEIDA | JEIDA/VESA/19INCH | |
| Language_Arbic | … | fixed | INFO+FACTORY |
| TOOLS Support | 32 | 0~255 | INFO+FACTORY |
| LNA Support | 0 | 0~255 | INFO+FACTORY |
| MediaPlay DB | On whth 5MB | fixed | |
| MediaPlay Movie | chapterinMedia | fixed | |
| MediaPlay DLNA | OFF | fixed | |
| MediaPlay PlayList | OFF | fixed | |
| NETWORK Support | Wireless | Not Support/Cable/Wireless | INFO+FACTORY |
| Info Link Server Type | operationg | operationgdevelopment/developing | INFO+FACTORY |
| Info Link Country | USA | None/USA | INFO+FACTORY |
| TTX List | … | fixed | INFO+FACTORY |
| TTX Group | … | fixed | INFO+FACTORY |
| 24Px4 Support | OFF | ON/OFF | INFO+FACTORY |
| Power Indicator Support | OFF | ON/OFF | INFO+FACTORY |
| BD Wise Support | ON | ON/OFF | INFO+FACTORY |
| Data Service Support | OFF | ON/OFF | INFO+FACTORY |

| | | | |
|---|---|---|---|
| Alternate Del | OFF | ON/OFF | INFO+FACTORY |
| OTN Server Type | operationg | operation/development | |
| OTN Test Server | OFF | OFF/ A/B/C/D/E Zone | |
| OTN Support | OFF | ON/OFF | |
| OTN Reset | | | |
| OTN Duration | OFF | ON/OFF | |
| OTN Fail Test | OFF | ON/OFF | |
| IIC Bus Stop | OFF | ON/OFF | INFO+FACTORY |
| Visual Test | Disable | fixed | INFO+FACTORY |
| T-CON USB Download | Failure | fixed | |
| Emergency Log Copy | | | INFO+FACTORY |
| Checksum | 0x0000 | | INFO+FACTORY |
| View Log | | SUB MENU | |

| Factory Name | Data | Range | Remark |
|---|---|---|---|
| Select Log Type | IR Key | NVRAM / DIAGNOSIS / IR KEY | |
| Log View | | | |
| Delete Log | | | |

| | | | |
|---|---|---|---|
| ColorSpace Support | HueSate Type | RGB Type / HueSate Type | INFO+FACTORY |
| Gemstar On/Off | OFF | ON/OFF | INFO+FACTORY |
| WSS Support | OFF | ON/OFF | INFO+FACTORY |
| PVR Support | OFF | ON/OFF | INFO+FACTORY |
| CI Support | OFF | ON/OFF | INFO+FACTORY |
| Eeprom Reset | | SUB MENU | INFO+FACTORY |

| Factory Name | Data | Range | Remark |
|---|---|---|---|
| Select Log Type | IR Key | NVRAM / DIAGNOSIS / IR KEY | |
| Log View | | | |
| Delete Log | | | |

| | | | |
|---|---|---|---|
| Spread Spectrum | | SUB MENU | INFO+FACTORY |

| Factory Name | Data | Range | Remark |
|---|---|---|---|
| LVDS Spread | ON | ON/OFF | INFO+FACTORY |
| Period | 40K | 30K/40K/50K/60K | INFO+FACTORY |
| Amplitude | 1.5 | 0.0/0.5/1.0/1.5/2.0/2.5/3.0 | INFO+FACTORY |
| DDR Spread | 1.00% | 0.1~2.0% | INFO+FACTORY |

| | | | |
|---|---|---|---|
| DDR Margin | | SUB MENU | INFO+FACTORY |

| Factory Name | Data | Range | Remark |
|---|---|---|---|
| A CTRL_OFFSET_0_3 | 0X0 | fixed | INFO+FACTORY |
| A CTRL_OFFSET_D | 0X0 | fixed | INFO+FACTORY |
| B CTRL_OFFSET_0_3 | 0X0 | fixed | INFO+FACTORY |
| B CTRL_OFFSET_D | 0X0 | fixed | INFO+FACTORY |

| | | | |
|---|---|---|---|
| H.264 Margin | 200 | 0~2000 | |
| MPEG Margin | 50 | 0~2001 | |

| | | | |
|---|---|---|---|
| Tuner Margin | 50 | 0~2002 | |
| SST | | SUB MENU | |

| Factory Name | Data | Range | Remark |
|---|---|---|---|
| Y0 Ref | 166 | 0~255 | |
| Y1 Ref | 148 | 0~255 | |
| Y2 Ref | 119 | 0~255 | |
| Y3 Ref | 101 | 0~255 | |
| Y4 Ref | 76 | 0~255 | |
| Y5 Ref | 60 | 0~255 | |
| Y6 Ref | 31 | 0~255 | |
| Y7 Ref | 0 | 0~255 | |
| Cb0 Ref | 128 | 0~255 | |
| Cb1 Ref | 64 | 0~255 | |
| Cb2 Ref | 148 | 0~255 | |
| Cb3 Ref | 85 | 0~255 | |
| Cb4 Ref | 171 | 0~255 | |
| Cb5 Ref | 108 | 0~255 | |
| Cb6 Ref | 194 | 0~255 | |
| Cb7 Ref | 0 | 0~255 | |
| Cr0 Ref | 128 | 0~255 | |
| Cr1 Ref | 137 | 0~255 | |
| Cr2 Ref | 64 | 0~255 | |
| Cr3 Ref | 74 | 0~255 | |
| Cr4 Ref | 181 | 0~255 | |
| Cr5 Ref | 192 | 0~255 | |
| Cr6 Ref | 118 | 0~255 | |
| Cr7 Ref | 0 | 0~255 | |

| | | | |
|---|---|---|---|
| SST_Th | | SUB MENU | |

| Factory Name | Data | Range | Remark |
|---|---|---|---|
| Y0 TH | 20 | 0~255 | |
| Y1 TH | 20 | 0~255 | |
| Y2 TH | 20 | 0~255 | |
| Y3 TH | 20 | 0~255 | |
| Y4 TH | 20 | 0~255 | |
| Y5 TH | 20 | 0~255 | |
| Y6 TH | 20 | 0~255 | |
| Y7 TH | 20 | 0~255 | |
| Cb0 TH | 20 | 0~255 | |
| Cb1 TH | 20 | 0~255 | |
| Cb2 TH | 20 | 0~255 | |
| Cb3 TH | 20 | 0~255 | |
| Cb4 TH | 20 | 0~255 | |
| Cb5 TH | 20 | 0~255 | |
| Cb6 TH | 20 | 0~255 | |
| Cb7 TH | 20 | 0~255 | |

| | | | | |
|---|---|---|---|---|
| | Cr0 TH | 20 | 0~255 | |
| | Cr1 TH | 20 | 0~255 | |
| | Cr2 TH | 20 | 0~255 | |
| | Cr3 TH | 20 | 0~255 | |
| | Cr4 TH | 20 | 0~255 | |
| | Cr5 TH | 20 | 0~255 | |
| | Cr6 TH | 20 | 0~255 | |
| | Cr7 TH | 20 | 0~255 | |
| | 2nd mips | ON | ON/OFF | |
| | 2nd mips count | 0 | 0~255 | |
| | Region | KOR | fixed | |
| | PnP Language | ... | fixed | INFO+FACTORY |
| | PC Auto Ident | Enable | Auto/Enable | |

| Hotel Option | Factory Name | Data | Range | Remark |
|---|---|---|---|---|
| | Hotel Mode | OFF | ON/OFF | |
| | SI Vender | Samsung | Samsung/2M/Locatel/VDA/VDA-S/Acentic/ Premiere/Sustinere/Quadriga/ETV/Ibahn/ Magilink/Otrum/PeninsulaSiemens/OCC/MTI/ MstreamsDAWNXTV/Enseo/Cardinal/Guestek/OFF/ Movielink/Swisscom | |
| | Power On Channel | 3 | 1~135 | |
| | Channel Type | ATV | ATV/DTV/CATV/CDTV | |
| | Power On Volume | 10 | 0~100 | |
| | Min Volume | 0 | 0~100 | |
| | Max Volume | 100 | 0~100 | |
| | Panel Button Lock | Unlock | Unlock/Lock/OnlyPower | |
| | Power On Source | TV | TV/AV/Comp/PC/HDMI1/HDMI2/HDMI3/HDMI4 | |

| Shop Option | Factory Name | Data | Range | Remark |
|---|---|---|---|---|
| | Shop Mode | OFF | ON/OFF | |
| | Exhibition Mode | OFF | ON/OFF | |

| Asia Option | Factory Name | Data | Range | Remark |
|---|---|---|---|---|
| | TTX | OFF | ON/OFF | INFO+FACTORY |
| | China HD | OFF | ON/OFF | INFO+FACTORY |
| | NT Conversion | OFF | ON/OFF | INFO+FACTORY |
| | Sepco 120Hz | OFF | ON/OFF | INFO+FACTORY |
| | Unbalance | OFF | ON/OFF | INFO+FACTORY |
| | FMTransmitter Support | OFF | ON/OFF | INFO+FACTORY |
| | FMTransmitter Carrier | OFF | ON/OFF | INFO+FACTORY |
| | AF Level adjust | 3 | 0~7 | INFO+FACTORY |
| | TX Power Level | 0 | 0~3 | INFO+FACTORY |
| | Mono Last Memory | OFF | ON/OFF | INFO+FACTORY |

| Sound | Factory Name | Data | Range | Remark |
|---|---|---|---|---|
| | High Devi | OFF | ON/OFF | |
| | Carrier_Mute | ON | ON/OFF | |
| | Volume Curve | Type2 | Type1/Type2/error | INFO+FACTORY |
| | Speaker Delay Normal | 10 | 0~255 | |
| | Pilot Level High Thld | 0x08h | 0x00~0xff | |
| | Pilot Level Low Thld | 0x05h | 0x00~0xff | |
| | FM Prescale | 17 | 0~255 | INFO+FACTORY |
| | AM Prescale | 10 | 0~255 | INFO+FACTORY |
| | NICAM Prescale | 33 | 0~255 | INFO+FACTORY |
| | Amp Volume | 0x10h | 0x00~0xff | INFO+FACTORY |
| | Amp Scale | 0x78h | 0x00~0xff | INFO+FACTORY |
| | Amp Check Sum | 0x0000a820 | fixed | INFO+FACTORY |
| | Woofer Type | 4 | 1~7 | INFO+FACTORY |
| | Woofer Scale | 0x7Fh | 0x00~0xff | INFO+FACTORY |
| | Woofer Check Sum | | | INFO+FACTORY |
| | Speaker EQ | ON | ON/OFF | |
| | PEQ Test | 0 | 0~7 | INFO+FACTORY |
| | Amp Model | NTP7300 | SAT369B/TAS5715/NPT7300 | INFO+FACTORY |
| | Speaker cut-off Freq | 4 | 0~16 | INFO+FACTORY |
| | SPDIF PCM Gain | -9dB | -10dB~0dB | INFO+FACTORY |
| | BTSC Mono Prescale | 0 | -10~10 | INFO+FACTORY |
| | BTSC streo Prescale | 0 | -10~10 | INFO+FACTORY |
| | SAO Prescale | 0 | -10~10 | INFO+FACTORY |
| | A2 Ident High Thld | 0 | -10~10 | INFO+FACTORY |
| | A2 Ident Low Thld | 0 | -10~10 | INFO+FACTORY |
| | Carrier2 Amp High Thld | 0 | -10~10 | INFO+FACTORY |
| | Carrier2 Amp Low Thld | 0 | -10~10 | INFO+FACTORY |
| | Carrier2 SNR High THR | 0 | -10~10 | INFO+FACTORY |
| | Carrier2 SNR Low THR | 0 | -10~10 | INFO+FACTORY |

| Config Option | Factory Name | Data | Range | Remark |
|---|---|---|---|---|
| | Num of ATV | 1 | 1~2 | INFO+FACTORY |
| | Num of DTV | 1 | 0~2 | INFO+FACTORY |
| | Num of AV | 2 | 0~3 | INFO+FACTORY |
| | Num of SVIDEO | 0 | 1~3 | INFO+FACTORY |
| | Num of Comp | 2 | 1~3 | INFO+FACTORY |
| | Num of HDMI | 4 | 0~4 | INFO+FACTORY |
| | Num of PC | 1 | 0~1 | INFO+FACTORY |
| | Num of SCART | 0 | 0~2 | INFO+FACTORY |
| | Num of DVI | 0 | 0~1 | INFO+FACTORY |
| | Num of OPTICAL Link | 0 | fixed | INFO+FACTORY |
| | Num of MEDIA | 1 | 0~1 | INFO+FACTORY |
| | Num of PANEL KEY | 6 | 0~8 | INFO+FACTORY |
| | Num of USB Port | 2 | 0~2 | INFO+FACTORY |
| | Num of HeadPhone | 0 | 0~1 | INFO+FACTORY |
| | MFT Offset | 62.5 | 50/62.5 | INFO+FACTORY |

| | | | | |
|---|---|---|---|---|
| | Select LCD/PDP | LCD | LCD/PDP | INFO+FACTORY |
| | HDMI/DVI SEL | 1 | 1~4 | INFO+FACTORY |
| | Indicator Led | OFF | ON/OFF | INFO+FACTORY |
| | Wall Mount | OFF | ON/OFF | INFO+FACTORY |
| | HV Flip | ON | ON/OFF | INFO+FACTORY |
| | Num of Display | 2 | 1~2 | INFO+FACTORY |
| | DVI/HDMI SOUND | Auto | Auto/DVI | INFO+FACTORY |
| | HDMI HOT PLUG | Disable | Enable/Disable | INFO+FACTORY |
| | HOTPLUG SWITCHING | Boot | Disable/Boot/Source | INFO+FACTORY |
| | HOTPLUG DURATION | 1200ms | 0~2000ms | INFO+FACTORY |
| | CLK TERM DURATION | 1200ms | 0~2000ms | INFO+FACTORY |
| | HDMI FLT CNT SIG | 200ms | 0~1000ms | INFO+FACTORY |
| | HDMI FLT CNT LOS | 600ms | 0~1000ms | INFO+FACTORY |
| | UNSTABLE BAN CNT | 3500ms | 0~100000ms | INFO+FACTORY |
| | HDMI Err Cnt | 5 | 0~10 | INFO+FACTORY |
| | HDMI ROBIN | ON | ON/OFF | INFO+FACTORY |
| | HDMI Callback | OFF | ON/OFF | INFO+FACTORY |
| | HDMI CTS Thld | 8 | 0~15 | INFO+FACTORY |
| | HDMI CTS Cnt1 | 1 | 0~15 | INFO+FACTORY |
| | TMDS_EQ2_Boost | 1 | 0~7 | INFO+FACTORY |
| | TMDS_EQ2_Gain | 0 | 0~3 | INFO+FACTORY |
| | TMDS_PLL_Loop | 3 | 0~3 | INFO+FACTORY |
| | TMDS_CPREG_BLEED | 1 | 0~1 | INFO+FACTORY |
| | HDMI EQ | AUTO | AUTO/Low/Middle/High/Strong | INFO+FACTORY |
| | HDMI Write Type | Combine | Combine/Separate | INFO+FACTORY |
| | HDMI Switch | SIL9287 | NONE/SIL9287/TMDS461 | INFO+FACTORY |
| | DVI SET TIME | 300ms | 0~1000ms | INFO+FACTORY |
| | Type Of PANEL KEY | Horizontal | Horzontal/Vertical/PDPVertical/Nne | INFO+FACTORY |
| | EcoSensor Support | ON | ON/OFF | INFO+FACTORY |
| | LEDMotionPlus Support | OFF | ON/OFF | INFO+FACTORY |
| | Natural Mode Support | ON | ON/OFF | INFO+FACTORY |
| | All Share Support | ON | ON/OFF | INFO+FACTORY |
| | Relax Mode Support | OFF | ON/OFF | INFO+FACTORY |
| | DVI-I Support | … | fixed | INFO+FACTORY |
| | Melfas Function Support | … | fixed | INFO+FACTORY |
| | Light Level Support | … | fixed | INFO+FACTORY |

| SCC | Factory Name | Data | Range | Remark |
|---|---|---|---|---|
| | SCC Mode | Dynamic | Dynamic/Movie | INFO+FACTORY |
| | SCC ON/OFF | OFF | ON/OFF | INFO+FACTORY |
| | SCC Input Data | | SUB MENU | INFO+FACTORY |

| Factory Name | Data | Range | Remark |
|---|---|---|---|
| Hx | 272 | 0~512 | INFO+FACTORY |
| Hy | 273 | 0~512 | INFO+FACTORY |
| Lx | 274 | 0~512 | INFO+FACTORY |
| Ly | 275 | 0~512 | INFO+FACTORY |

| | | | | |
|---|---|---|---|---|
| | sSCC Const | | SUB MENU | INFO+FACTORY |
| | **Factory Name** | **Data** | **Range** | **Remark** |
| | sSCC Hx | 550 | 0~1024 | INFO+FACTORY |
| | sSCC Hy | 566 | 0~1024 | INFO+FACTORY |
| | sSCC Lx | 598 | 0~1024 | INFO+FACTORY |
| | sSCC Ly | 550 | 0~1024 | INFO+FACTORY |
| | pSCC Const | | SUB MENU | INFO+FACTORY |
| | **Factory Name** | **Data** | **Range** | **Remark** |
| | Hx | 272 | 0~512 | INFO+FACTORY |
| | Hy | 273 | 0~512 | INFO+FACTORY |
| | Lx | 274 | 0~512 | INFO+FACTORY |
| | Ly | 275 | 0~512 | INFO+FACTORY |
| | SCC Source Data | PBA | PBA/PANEL | INFO+FACTORY |
| | SWAP | PBA | PBA/PANEL | INFO+FACTORY |
| | SCC Source Data | PBA | PBA/PANEL | INFO+FACTORY |
| | SWAP | PBA | PBA/PANEL | INFO+FACTORY |

## ■ SVC

| | | | | |
|---|---|---|---|---|
| **Shop Option** | **Factory Name** | **Data** | **Range** | **Remark** |
| | Test Pattern | | SUB MENU | |
| | **Factory Name** | **Data** | **Range** | **Remark** |
| | Pattern Sel | OFF | OFF/ White/Grey/Black/Red/Green/Blue | |
| | Logic Pattern Sel | … | fixed | |
| | Logic Level Sel | … | fixed | |
| | Panel Auto Setting | Success | | INFO+FACTORY |
| | Panel Display Time | 8Hr | fixed | |
| | Logic Usb D/L | Off | fixed | INFO+FACTORY |
| | Tuner Status | | | |
| **TUNER STATUS** | **Factory Name** | **Data** | **Range** | **Remark** |
| | DVB | | SUB MENU | |
| | **Factory Name** | **Data** | **Range** | **Remark** |
| | SNR | | fixed | |
| | BER | | fixed | |
| | Singal Strength | | fixed | |
| | Bandwidth | | fixed | |
| | Frequency | | fixed | |
| | LNA Status | | fixed | |
| | FFT | | fixed | |
| | Modulation | | fixed | |
| | Code Rate | | fixed | |
| | GI | | fixed | |

| | | | |
|---|---|---|---|
| Hier Modulation | | fixed | |
| Frequency Offset | | fixed | |
| Timing Offset | | fixed | |
| AGC | | fixed | |
| UCB | | fixed | |
| PLL Type | | fixed | |
| DEMOD Type | | fixed | |
| TPS LOCK | | fixed | |
| RS Lock | | fixed | |
| SSI | | fixed | |
| SQI | | fixed | |

| | | | |
|---|---|---|---|
| ISDB-T | | SUB MENU | |

| Factory Name | Data | Range | Remark |
|---|---|---|---|
| FFT Size_1 | | fixed | |
| Guard Interval_1 | | fixed | |
| Freq. Offset_1 | | fixed | |
| SNR_1 | | fixed | |
| IF AGC_1 | | fixed | |
| TMCC Lock_1 | | fixed | |
| TS Packet_1 | | fixed | |
| Master Lock_1 | | fixed | |
| A_Modulation_1 | | fixed | |
| A_Code Rate_1 | | fixed | |
| A_Timer InterLeave_1 | | fixed | |
| A_Segments Num_1 | | fixed | |
| A_Ber_1 | | fixed | |
| B_Modulation_! | | fixed | |
| B_Code Rate_1 | | fixed | |
| B_Timer InterLeave_1 | | fixed | |
| B_Segments Num_1 | | fixed | |
| B_BER_1 | | fixed | |
| C_Modulation_1 | | fixed | |
| C_Code Rate_1 | | fixed | |
| C_Timer InterLeave_1 | | fixed | |
| C_Segments Num_1 | | fixed | |
| C_BER_1 | | fixed | |

## ■ Expert

**ADC/WB**

| Factory Name | Data | Range | Remark |
|---|---|---|---|
| ADC | | SUB MENU | |

| Factory Name | Data | Range | Remark |
|---|---|---|---|
| AV Calibration | Success | Success / Failure | |
| Comp Calibration | Success | Success / Failure | |
| PC Calibration | Success | Success / Failure | |
| HDMI Calibration | Success | Success / Failure | |

| ADC Target | | SUB MENU | |
|---|---|---|---|

| Factory Name | Data | Range | Remark |
|---|---|---|---|
| 1st_AV_Low | 64 | 0 ~ 1020 | |
| 1st_AV_High | 880 | 0 ~ 1020 | |
| 1st_AV_Delta | 2 | 0 ~ 7 | |
| 1st_COMP_Y_Low | 64 | 0 ~ 1020 | |
| 1st_COMP_Cb_Low | … | | |
| 1st_COMP_Cr_Low | … | | |
| 1st_COMP_Y_High | 940 | 0 ~ 1020 | |
| 1st_COMP_Cb_High | … | | |
| 1st_COMP_Cr_High | … | | |
| 1st_COMP_Delta | 2 | 0~7 | |
| 1st_PC_R_Low | 16 | 0 ~ 1020 | |
| 1st_PC_G_Low | … | | |
| 1st_PC_B_Low | … | | |
| 1st_PC_R_High | 1004 | 0 ~ 1020 | |
| 1st_PC_G_Low | … | | |
| 1st_PC_B_Low | … | | |
| 1st_PC_Delta | 2 | 0~7 | |
| 2nd_AV_R_Low | 4 | fixed | |
| 2nd_AV_G_Low | 4 | fixed | |
| 2nd_AV_B_Low | 4 | fixed | |
| 2nd_AV_R_High | 940 | fixed | |
| 2nd_AV_G_High | 940 | fixed | |
| 2nd_AV_B_High | 940 | fixed | |
| 2nd_AV_Delta | 2 | 0~7 | |
| 2nd_COMP_R_Low | 4 | fixed | |
| 2nd_COMP_G_Low | 4 | fixed | |
| 2nd_COMP_B_Low | 4 | fixed | |
| 2nd_COMP_R_High | 940 | fixed | |
| 2nd_COMP_G_High | 940 | fixed | |
| 2nd_COMP_B_High | 940 | fixed | |
| 2nd_COMP_Delta | 2 | 0~7 | |
| 2nd_PC_R_Low | 4 | fixed | |
| 2nd_PC_G_Low | 4 | fixed | |
| 2nd_PC_B_Low | 4 | fixed | |
| 2nd_PC_R_High | 940 | fixed | |

| | | | |
|---|---|---|---|
| 2nd_PC_G_High | 940 | fixed | |
| 2nd_PC_B_High | 940 | fixed | |
| 2nd_PC_Delta | 2 | 0~7 | |
| 2nd_HDMI_R_Low | 4 | fixed | |
| 2nd_HDMI_G_Low | 4 | fixed | |
| 2nd_HDMI_B_Low | 4 | fixed | |
| 2nd_HDMI_R_High | 940 | fixed | |
| 2nd_HDMI_G_High | 940 | fixed | |
| 2nd_HDMI_B_High | 940 | fixed | |
| 2nd_HDMI_Delta | 2 | 0~7 | |

| ADC RESULT | | SUB MENU | |
|---|---|---|---|
| **Factory Name** | **Data** | **Range** | **Remark** |
| 1st_Y_GH | 0 | fixed | |
| 1st_Y_GL | 0 | fixed | |
| 1st_Cb_BH | 0 | fixed | |
| 1st_Cb_BL | 0 | fixed | |
| 1st_Cr_RH | 0 | fixed | |
| 1st_Cr_RL | 0 | fixed | |
| 2nd_R_L | 134 | 0 ~ 255 | |
| 2nd_G_L | 134 | 0 ~ 255 | |
| 2nd_B_L | 134 | 0 ~ 255 | |
| 2nd_R_H | 49 | 0 ~ 255 | |
| 2nd_G_H | 49 | 0 ~ 255 | |
| 2nd_B_H | 49 | 0 ~ 255 | |

| WB | | SUB MENU | |
|---|---|---|---|
| **Factory Name** | **Data** | **Range** | **Remark** |
| Sub Brightness | 128 | 0 ~ 1023 | |
| R_Offset | 512 | 0 ~ 1023 | |
| G_Offset | 512 | 0 ~ 1023 | |
| B_Offset | 512 | 0 ~ 1023 | |
| Sub Contrast | 128 | 0 ~ 1023 | |
| R_Gain | 512 | 0 ~ 1023 | |
| G_Gain | 512 | 0 ~ 1023 | |
| B_Gain | 512 | 0 ~ 1023 | |
| Movie R Offset | … | fixed | |
| Movie B Offset | … | fixed | |
| Movie R Gain | … | fixed | |
| Movie B Gain | … | fixed | |

# 4-4. White Balance - Calibration

## 4-4-1 White Balance -Calibration

| | | |
|---|---|---|
| 1. Calibration | → | AV Calibration<br>Comp Calibration<br>PC Calibration<br>HDMI Calibration |

## 4-4-2 White Balance - Adjustment

| | | (low light) | (hight light) |
|---|---|---|---|
| 3. W/B | → | Sub Bright<br>R offset<br>G offset<br>B offset | Sub Contrast<br>R gain<br>G gain<br>B gain |

(W/B adjustment Condition refer next page)

# 4-5. White Ratio (Balance) Adjustment

1. You can adjust the white ratio in factory mode (1:Calibration, 3:White-Balance).
2. Since the adjustment value and the data value vary depending on the input source, you have to adjust these in CVBS, Component 1 and HDMI 1 modes.
3. The optimal values for each mode are configured by default. (Refer to Table 1, 2)
   It varies with Panel's size and Specification.

- Equipment : CS-210
- Pattern: MIK K-7256 #92 "Flat W/B Pattern" as standard
- Use other equipment only after comparing the result with that of the Master equipment.
- Set Aging time : 60min

- Calibration and Manual setting for WB adjustment.

HDMI : Calibration at #24 Chessboard Pattern → Manual adjustment #92 pattern (720p)
COMP: Calibration at #24 Chessboard Pattern → Manual adjustment at #92 pattern (720p)
CVBS: Calibration at #24 Chessboard Pattern → Manual adjustment at #92 pattern (NTSC)

- If finishing in HDMI mode, adjustment coordinate is almost same in AV/COMP mode.
- White Balance Manual Adjustment

# 4-6. Servicing Information

## 4-6-1 USB Download Method

Software Upgrade upgrades can be performed via broadcasting signal or by downloading the new firmware from samsung.com to a USB memory device.
Current Version is the software already installed in the TV.

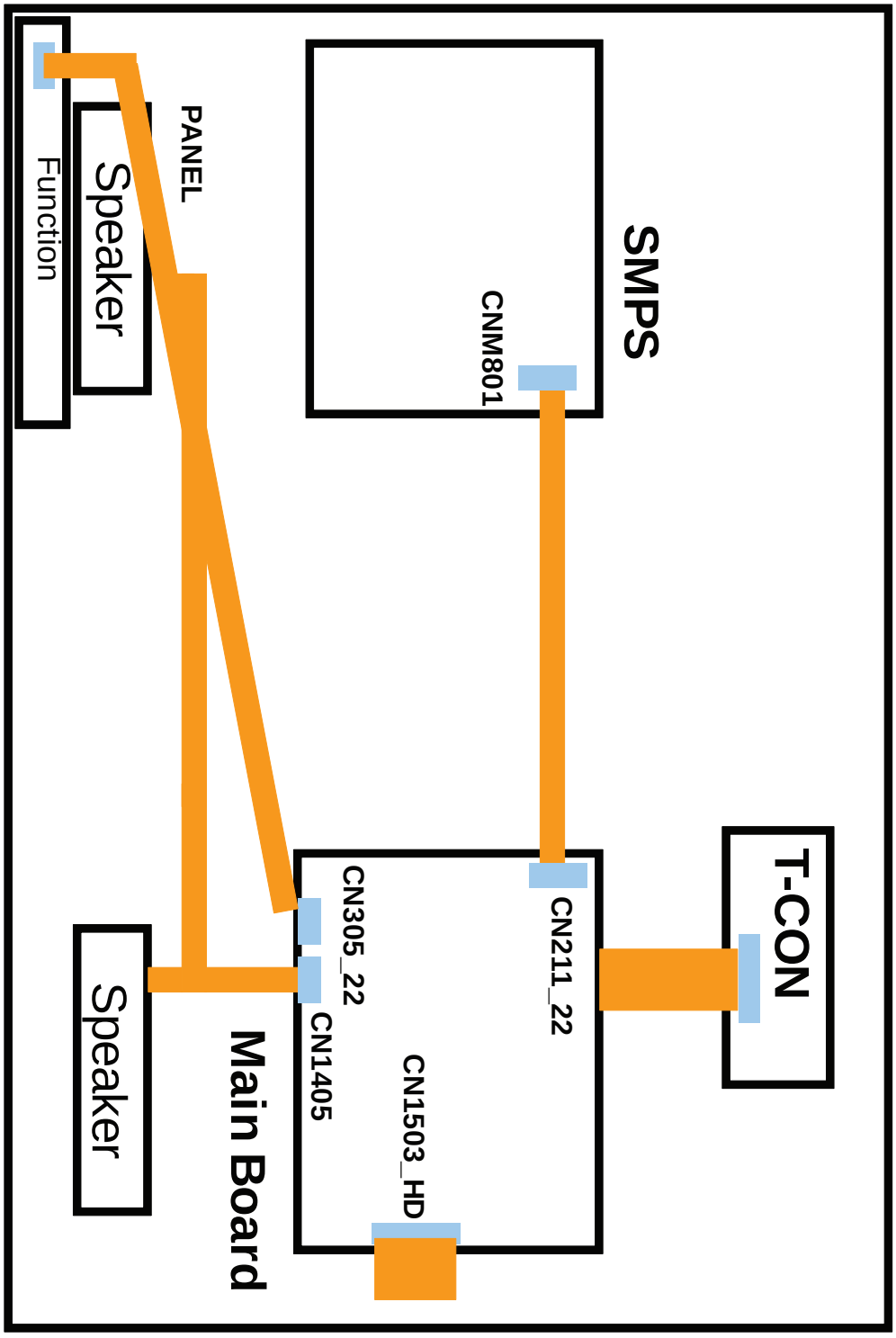
**Note** Software is represented as 'Year/Month/Day_Version'.
Installing the latest version is recommended.

- **By USB**: Insert a USB drive containing the firmware upgrade file downloaded from samsung.com into the TV. Please be careful not to disconnect the power or remove the USB drive until upgrades is complete. The TV will turn off and on automatically after completing the firmware upgrade. When software is upgraded, video and audio settings you have made will return to their default settings. We recommend you to write down your settings so that you can easily reset them after the upgrade.
- **Alternative Software (Backup)**: If there is an issue with the new firmware and it is affecting operation, you can change the software to the previous version.
  **Note** If software was changed, existing software is displayed.

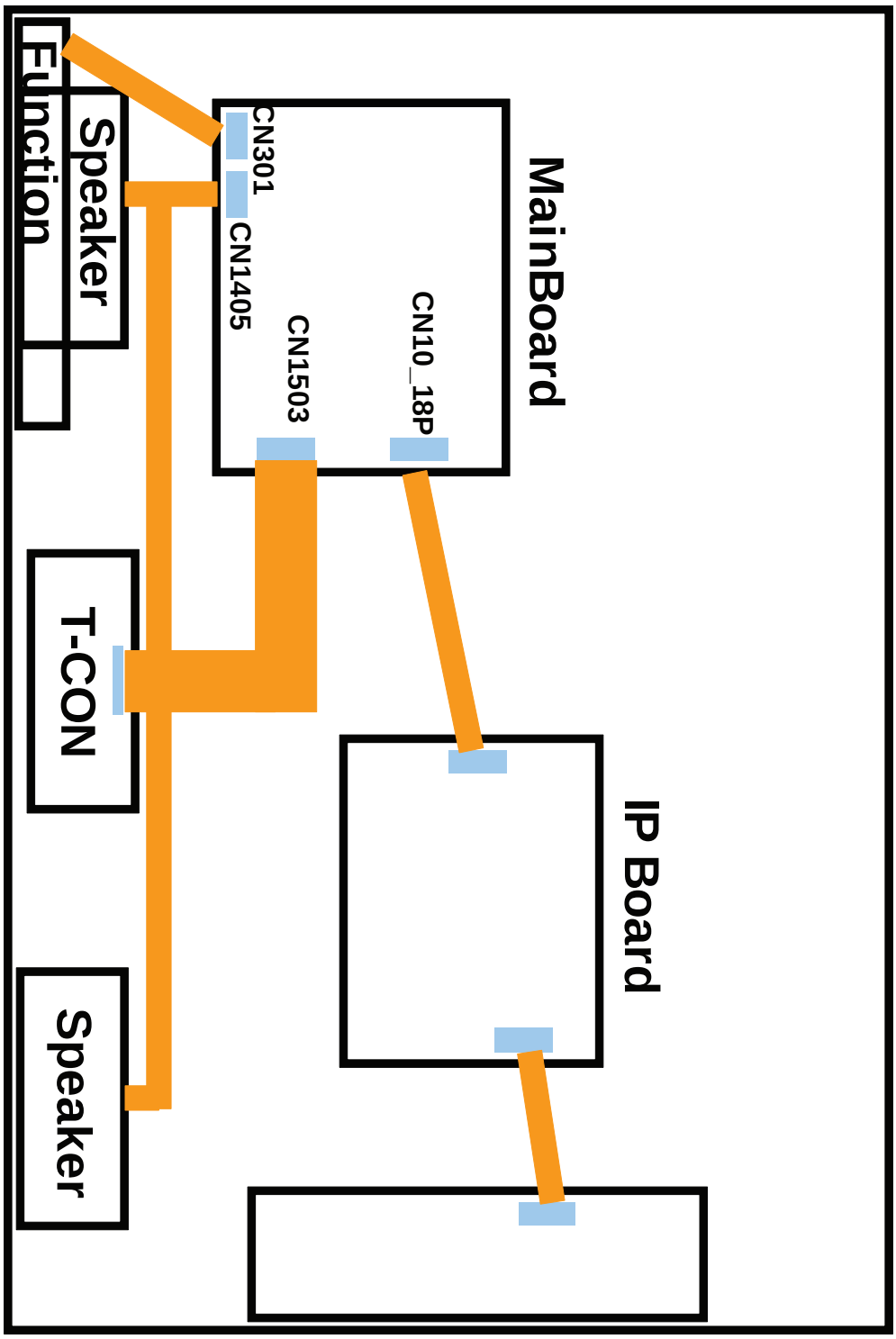
# 6. Wiring Diagram

## 6-1. Wiring Diagram

■ **C450 : 22"**



## ■ 26" / 32"


Function
Speaker
CN301
CN1405
CN1503
CN10_18P
MainBoard
T-CON
IP Board
Speaker

## 6-2. Connector

| FCN402 (to Panel) C550/C540(40"/46")/C530 | | | |
|---|---|---|---|
| 1 | NC | 27 | EVEN[0]- |
| 2 | NC | 28 | GND |
| 3 | NC | 29 | ODD[4]+ |
| 4 | NC | 30 | ODD[4]- |
| 5 | NC | 31 | ODD[3]+ |
| 6 | NC | 32 | ODD[3]- |
| 7 | FORMAT | 33 | GND |
| 8 | SDA_ Panel | 34 | ODDCLK+ |
| 9 | TCON_ WP | 35 | ODDCLK- |
| 10 | NC | 36 | GND |
| 11 | SDA_ Panel | 37 | ODD[2]+ |
| 12 | SCL_ Panel | 38 | ODD[2]- |
| 13 | GND | 39 | ODD[1]+ |
| 14 | EVEN[4]+ | 40 | ODD[1]- |
| 15 | EVEN[4]- | 41 | ODD[0]+ |
| 16 | EVEN[3]+ | 42 | ODD[0]- |
| 17 | EVEN[3]- | 43 | GND |
| 18 | GND | 44 | GND |
| 19 | EVENCLK+ | 45 | GND |
| 20 | EVENCLK- | 46 | NC |
| 21 | GND | 47 | Panel_ VCC |
| 22 | EVEN[2]+ | 48 | Panel_ VCC |
| 23 | EVEN[2]- | 49 | Panel_ VCC |
| 24 | EVEN[1]+ | 50 | Panel_ VCC |
| 25 | EVEN[1]- | 51 | Panel_ VCC |
| 26 | EVEN[0]+ | | |

| ZCN1303_HD(to Panel) C540(32")/C450 | | | |
|---|---|---|---|
| 1 | Panel_ VCC | 16 | ODD[CLK]+ |
| 2 | Panel_ VCC | 17 | ODD[CLK]- |
| 3 | Panel_ VCC | 18 | GND |
| 4 | Panel_ VCC | 19 | ODD[2]+ |
| 5 | Panel_ VCC | 20 | ODD[2]- |
| 6 | GND | 21 | GND |
| 7 | GND | 22 | ODD[1]+ |
| 8 | GND | 23 | ODD[1]- |
| 9 | TCON_ WP | 24 | GND |
| 10 | FORMAT | 25 | ODD[0]+ |
| 11 | NC | 26 | ODD[0]- |
| 12 | GND | 27 | GND |
| 13 | ODD[3]+ | 28 | SDA_ TCON |
| 14 | ODD[3]- | 29 | SCL_ TCON |
| 15 | GND | 30 | NC |

| CN202 (to Powr board) | | | |
|---|---|---|---|
| 1 | B12VS | 10 | GND |
| 2 | SW_ POWER | 11 | GND |
| 3 | B12VS | 12 | H_OUT |
| 4 | A5V | 13 | B13V |
| 5 | B5V | 14 | PWM_ DIMMING |
| 6 | B5V | 15 | B13V |
| 7 | B5V | 16 | SW_ INVERTER |
| 8 | GND | 17 | B13V |
| 9 | GND | 18 | IP_DET |

| CN401(FUNCTION) | | | |
|---|---|---|---|
| 1 | IR | 6 | KEY_INPUT1 |
| 2 | GND | 7 | KEY_INPUT2 |
| 3 | A5V | 8 | LED_STB |
| 4 | MSCL | 9 | FUNC_9 |
| 5 | MSDA | 10 | LED_CONTROL |

| CN501(LAN) C550 | | | |
|---|---|---|---|
| 1 | LAN_TX- | 5 | LAN_VCC |
| 2 | GND | 6 | LAN_RX- |
| 3 | LAN_TX+ | 7 | NC |
| 4 | LAN_RX+ | 8 | GND |

| CN901(PC) | | | |
|---|---|---|---|
| 1 | PC_RED | 9 | PC_5V |
| 2 | PC_ GREEN | 10 | IDENT_ PC |
| 3 | PC_BLUE | 11 | R_FANET |
| 4 | T_FANET | 12 | SDA_ DOWN |
| 5 | GND | 13 | PC_HS |
| 6 | GND | 14 | PC_VS |
| 7 | GND | 15 | SCL_ DOWN |
| 8 | GND | | |

| CN902(PC/DIV SOUND) | | | |
|---|---|---|---|
| 1 | GND | 4 | NC |
| 2 | PC_SR_IN | 5 | NC |
| 3 | PC_SL_IN | 6 | NC |

| CN903(DEBUG) | | | |
|---|---|---|---|
| 1 | GND | 4 | DEBUG_ TX |
| 2 | DEBUG_ RX | 5 | DEBUG_ TX |
| 3 | DEBUG_ TX | 6 | GND |

| CN701(UNIVERSAL JACK) | | | |
|---|---|---|---|
| 1 | GND | 16 | GND |
| 2 | COM2_SL | 17 | COMP1_SL |
| 3 | COM2_ SR | 18 | COMP1_ SR |
| 4 | GND | 19 | GND |
| 5 | COMP2_ SR | 20 | COMP1_ SR |
| 6 | COMP2_ SL | 21 | COMP1_SL |
| 7 | GND | 22 | GND |
| 8 | COMP2_ PR | 23 | COMP1_ PR |
| 9 | COMP2_ PR | 24 | COMP1_ PR |
| 10 | GND | 25 | GND |
| 11 | COMP2_ PB | 26 | IDENT_COMP1 |
| 12 | COMP2_ PB | 27 | COMP1_PB |
| 13 | GND | 28 | GND |
| 14 | IDENT_ COMP2 | 29 | IDENT_AV |
| 15 | COMP2_Y | 30 | COMP1_Y |

| CN1202 (SPEAKER) | | | |
|---|---|---|---|
| 1 | R+ | 3 | L+ |
| 2 | R- | 4 | L- |

| CN705_2U (REAR USB) C550 | | | |
|---|---|---|---|
| 1 | USB_VCC | 3 | USB_DP |
| 2 | USB_DM | 4 | GND |

| CN706 (SIDE USB) | | | |
|---|---|---|---|
| 1 | USB_VCC | 3 | USB_DP |
| 2 | USB_DM | 4 | GND |

| CN704 (SIDE AV) C550/C540/C30 | | | |
|---|---|---|---|
| 1 | GND | 6 | SL_IN |
| 2 | IDENT_AV | 7 | GND |
| 3 | CVBS | 8 | SL_IN |
| 4 | GND | 9 | SR_IN |
| 5 | SR_IN | | |

| CN1002 (HDMI1) | | | |
|---|---|---|---|
| 1 | HDMI1_ RX2+ | 11 | GND |
| 2 | GND | 12 | HDMI1_ RXCLK- |
| 3 | HDMI1_ RX2- | 13 | HDMI_ CEC |
| 4 | HDMI1_ RX1+ | 14 | GND |
| 5 | GND | 15 | SCL |
| 6 | HDMI1_ RX1- | 16 | SDA |
| 7 | HDMI1_ RX0+ | 17 | GND |
| 8 | GND | 18 | 5V |
| 9 | HDMI1_ RX0- | 19 | HPD |
| 10 | HDMI1_ RXCLK+ | | |

| CN1003 (HDMI2) | | | |
|---|---|---|---|
| 1 | HDMI2_ RX2+ | 11 | GND |
| 2 | GND | 12 | HDMI2_ RXCLK- |
| 3 | HDMI2_ RX2- | 13 | HDMI_ CEC |
| 4 | HDMI2_ RX1+ | 14 | GND |
| 5 | GND | 15 | SCL |
| 6 | HDMI2_ RX1- | 16 | SDA |
| 7 | HDMI2_ RX0+ | 17 | GND |
| 8 | GND | 18 | 5V |
| 9 | HDMI2_ RX0- | 19 | HPD |
| 10 | HDMI2_ RXCLK+ | | |

| CN1004 (HDMI3) C550/C540 | | | |
|---|---|---|---|
| 1 | HDMI3_ RX2+ | 11 | GND |
| 2 | GND | 12 | HDMI3_ RXCLK- |
| 3 | HDMI3_ RX2- | 13 | HDMI_ CEC |
| 4 | HDMI3_ RX1+ | 14 | GND |
| 5 | GND | 15 | SCL |
| 6 | HDMI3_ RX1- | 16 | SDA |
| 7 | HDMI3_ RX0+ | 17 | GND |
| 8 | GND | 18 | 5V |
| 9 | HDMI3_ RX0- | 19 | HPD |
| 10 | HDMI3_ RXCLK+ | | |

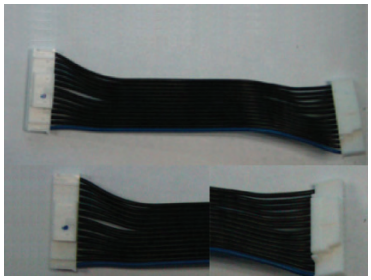
| CN1001 (SIDE HDMI4) | | | |
|---|---|---|---|
| 1 | HDMI4_ RX2+ | 11 | GND |
| 2 | GND | 12 | HDMI4_ RXCLK- |
| 3 | HDMI4_ RX2- | 13 | HDMI_ CEC |
| 4 | HDMI4_ RX1+ | 14 | GND |
| 5 | GND | 15 | SCL |
| 6 | HDMI4_ RX1- | 16 | SDA |
| 7 | HDMI4_ RX0+ | 17 | GND |
| 8 | GND | 18 | 5V |
| 9 | HDMI4_ RX0- | 19 | HPD |
| 10 | HDMI4_ RXCLK+ | | |

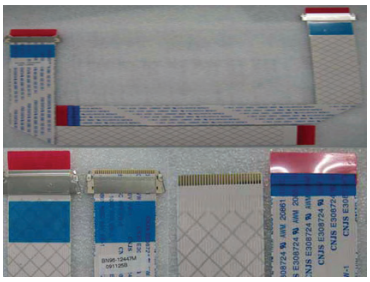
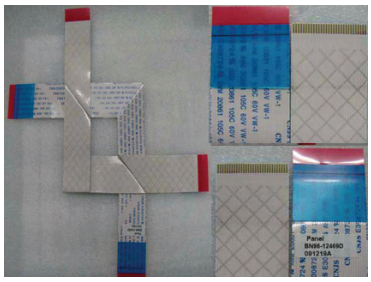
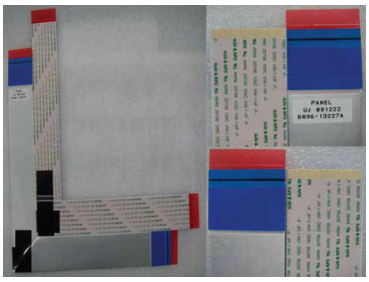
| CN1201 (MONITOR OUT) | | | |
|---|---|---|---|
| 1 | GND | 5 | NC |
| 2 | OUT_R | 6 | GND |
| 3 | OUT_R | 7 | NC |
| 4 | GND | | |

## 6-3. Connector Functions

| Connector | Functions |
|---|---|
| Main CN201 ⟷IP CN802 | Supply main power and dimming signal from IP board to Main Board. |
| Main CN1302/ZCN1303_HD ⟷T-CON CNF1 | The LVDS signal transfered from Main Board to Panel . |
| IP CN803 ⟷ Panel CN1 (14 Pin) | Supply power from IP board to Driver Board. |
| IP CNI802 ⟷ Panel CN1 (2 Pin) | Supply power from IP board to Driver Board. |
| IP CNI801 ⟷ Panel CN3 (7 Pin) | Supply power from IP board to Driver Board. |

## 6-4. Cables

| Use | LEAD (Main-IP 18P) | LEAD (Inverter 14P) |
|---|---|---|
| Code | 26" : BN39-01267L(125mm)<br>32" : BN39-01267A(200mm) | 26" : BN39-01274A(80mm)<br>32" : BN39-01274A(80mm) |
| Photo | |  |

| Use | LVDS (Main - TCON) | | |
|---|---|---|---|
| Code | BN96-12453D | 26" : BN96-12469D | 32" : BN96-13227A |
| Photo |  |  |  |